

chain nodes :

7 8 17 18 25 26 35 36 65

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 19 20 21 22 23 24 37 38 39 40 41 46
47 48 49 50 55 56 57 58 59

chain bonds :

2-7 7-8 8-37 12-17 17-18 18-46 20-25 25-26 26-55 35-36 36-65

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24 37-38 37-41 38-39 39-40 40-41 46-47 46-50 47-48 48-49 49-50
55-56 55-59 56-57 57-58 58-59

exact/norm bonds :

2-7 7-8 12-17 17-18 20-25 25-26 35-36 36-65 37-38 37-41 38-39 39-40 40-41
46-47 46-50 47-48 48-49 49-50 55-56 55-59 56-57 57-58 58-59

exact bonds :

8-37 18-46 26-55

normalized bonds :

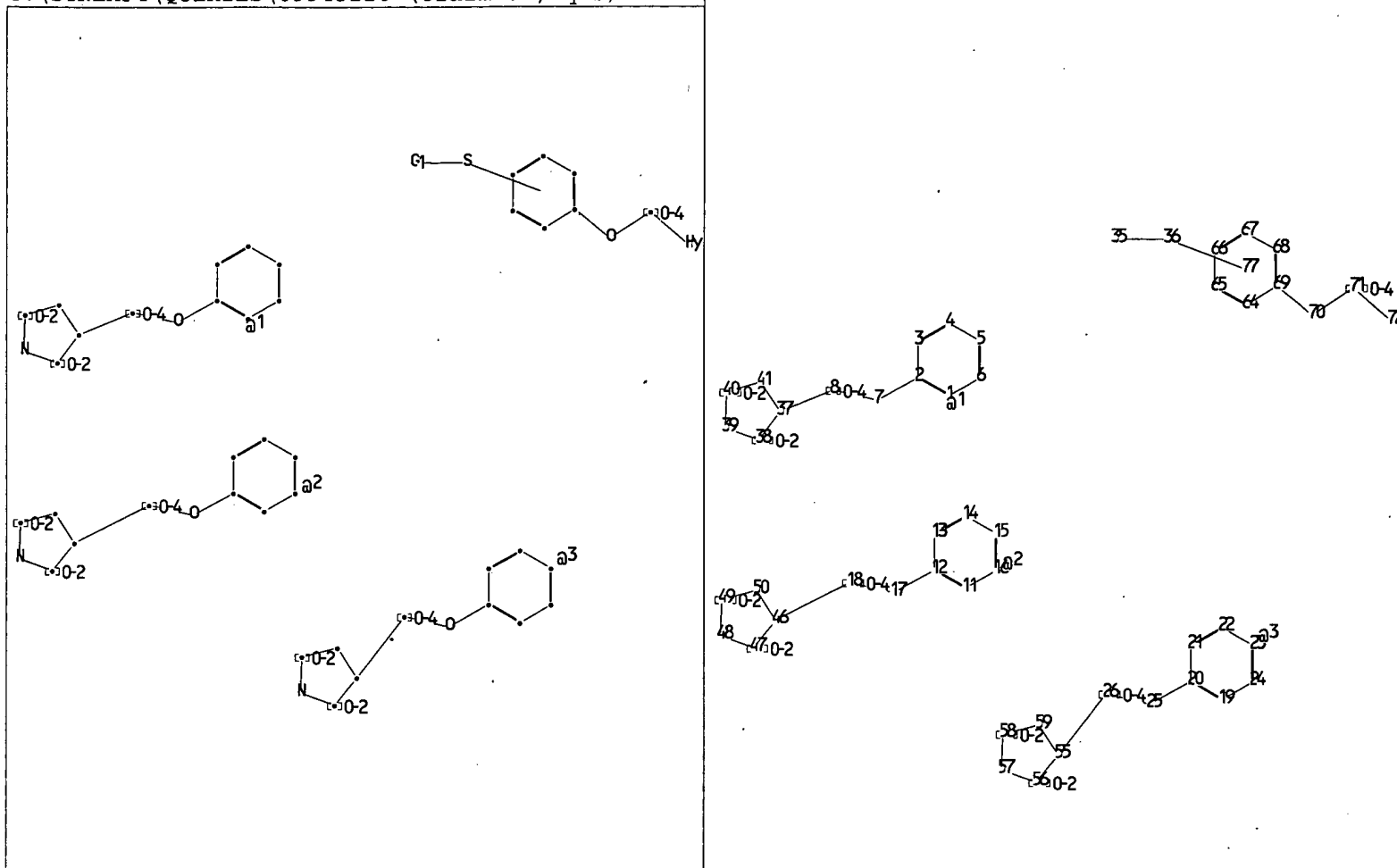
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24

G1: [*1], [*2], [*3]

G2: [*2], [*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 11:Atom 12:Atom 13:Atom
14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom
24:Atom 25:CLASS 26:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:Atom
41:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 55:Atom 56:Atom 57:Atom 58:CLASS
59:CLASS 65:CLASS



chain nodes :

7 8 17 18 25 26 35 36 70 71 72

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 19 20 21 22 23 24 37 38 39 40 41 46
47 48 49 50 55 56 57 58 59 64 65 66 67 68 69

chain bonds :

2-7 7-8 8-37 12-17 17-18 18-46 20-25 25-26 26-55 35-36 69-70 70-71 71-72

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24 37-38 37-41 38-39 39-40 40-41 46-47 46-50 47-48 48-49 49-50
55-56 55-59 56-57 57-58 58-59 64-65 64-69 65-66 66-67 67-68 68-69

exact/norm bonds :

2-7 7-8 12-17 17-18 20-25 25-26 35-36 69-70 70-71 71-72

exact bonds :

8-37 18-46 26-55 37-38 37-41 38-39 39-40 40-41 46-47 46-50 47-48 48-49 49-50
55-56 55-59 56-57 57-58 58-59

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24 64-65 64-69 65-66 66-67 67-68 68-69

isolated ring systems :

containing 64 :

G1:[*1],[*2],[*3]

G2:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 11:Atom 12:Atom 13:Atom
14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom
24:Atom 25:CLASS 26:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:Atom
41:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 55:Atom 56:Atom 57:Atom 58:CLASS
59:CLASS

64:Atom 65:CLASS 66:CLASS 67:Atom 68:Atom 69:Atom 70:CLASS 71:CLASS

72:Atom 77:CLASS

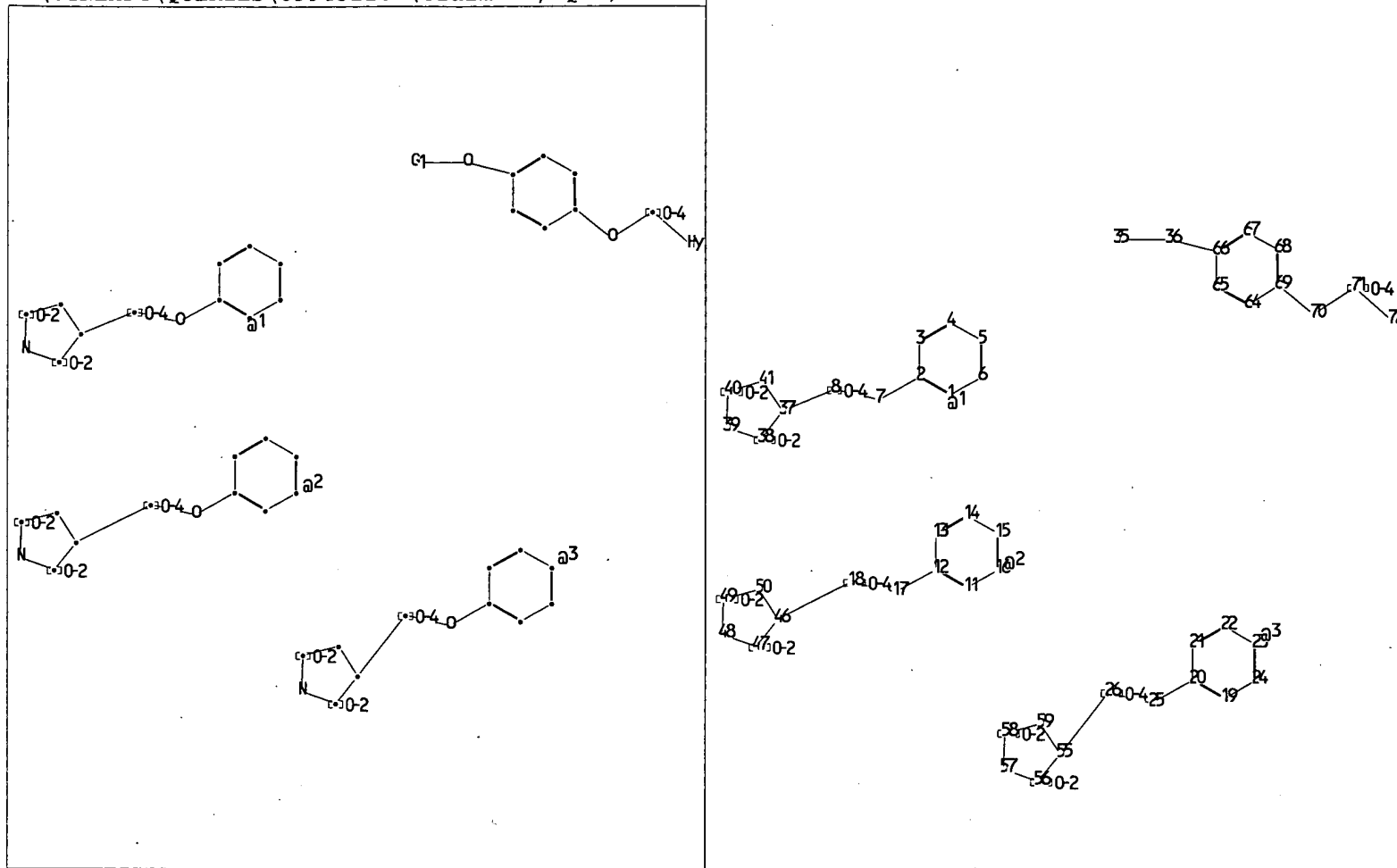
Generic attributes :

72:

Saturation : Saturated

Number of Hetero Atoms : less than 2

Type of Ring System : Monocyclic



chain nodes :

7 8 17 18 25 26 35 36 70 71 72

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 19 20 21 22 23 24 37 38 39 40 41 46
47 48 49 50 55 56 57 58 59 64 65 66 67 68 69

chain bonds :

2-7 7-8 8-37 12-17 17-18 18-46 20-25 25-26 26-55 35-36 36-66 69-70 70-71 71-72

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24 37-38 37-41 38-39 39-40 40-41 46-47 46-50 47-48 48-49 49-50
55-56 55-59 56-57 57-58 58-59 64-65 64-69 65-66 66-67 67-68 68-69

exact/norm bonds :

2-7 7-8 12-17 17-18 20-25 25-26 35-36 36-66 37-38 37-41 38-39 39-40 40-41
46-47 46-50 47-48 48-49 49-50 55-56 55-59 56-57 57-58 58-59 69-70 70-71 71-72

exact bonds :

8-37 18-46 26-55

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20 19-24 20-21
21-22 22-23 23-24 64-65 64-69 65-66 66-67 67-68 68-69

isolated ring systems :

containing 64 :

G1:[*1],[*2],[*3]

G2:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 11:Atom 12:Atom 13:Atom
14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom
24:Atom 25:CLASS 26:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:Atom
41:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 55:Atom 56:Atom 57:Atom 58:CLASS
59:CLASS

64:Atom 65:CLASS 66:CLASS 67:Atom 68:Atom 69:Atom 70:CLASS 71:CLASS

72:Atom

=>

Uploading 09943220 (claim 42).str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L2 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L3 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42).str

L4 STRUCTURE UPLOADED

=> que L4 AND L2 NOT L3

L5 QUE L4 AND L2 NOT L3

=> d l5

L5 HAS NO ANSWERS

L2 SCR 1840

L3 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L4 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 QUE L4 AND L2 NOT L3

=> s l5 sss sam

SAMPLE SEARCH INITIATED 14:23:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 181746 TO ITERATE

0.6% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 0

L6 0 SEA SSS SAM L4 AND L2 NOT L3

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L7 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L8 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - broad).str

L9 STRUCTURE UPLOADED

=> que L9 AND L7 NOT L8

L10 QUE L9 AND L7 NOT L8

=> d l10

L10 HAS NO ANSWERS

L7 SCR 1840

L8 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L9 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

L10 QUE L9 AND L7 NOT L8

=> s l10 sss sam

SAMPLE SEARCH INITIATED 14:29:35 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 378547 TO ITERATE

0.3% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 0

L11 0 SEA SSS SAM L9 AND L7 NOT L8

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L12 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L13 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - broad).str

L14 STRUCTURE UPLOADED

=> que L14 AND L12 NOT L13

L15 QUE L14 AND L12 NOT L13

=> d l15

L15 HAS NO ANSWERS

L12 SCR 1840

L13 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L14 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

L15 QUE L14 AND L12 NOT L13

=> s l15 sss sam

SAMPLE SEARCH INITIATED 14:32:05 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 378547 TO ITERATE

0.3% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L16 0 SEA SSS SAM L14 AND L12 NOT L13

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L17 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L18 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - partial).str

L19 STRUCTURE UPLOADED

=> que L19 AND L17 NOT L18

L20 QUE L19 AND L17 NOT L18

=> d l20

L20 HAS NO ANSWERS

L17 SCR 1840

L18 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L19 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L20 QUE L19 AND L17 NOT L18

=> s l20 sss sam

SAMPLE SEARCH INITIATED 14:34:11 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 339079 TO ITERATE

0.3% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L21 0 SEA SSS SAM L19 AND L17 NOT L18

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L22 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L23 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - partial).str

L24 STRUCTURE UPLOADED

=> que L24 AND L22 NOT L23

L25 QUE L24 AND L22 NOT L23

=> d l25

L25 HAS NO ANSWERS

L22 SCR 1840

L23 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L24 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L25 QUE L24 AND L22 NOT L23

=> s l25 sss sam

SAMPLE SEARCH INITIATED 14:38:40 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 339079 TO ITERATE

0.3% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L26 0 SEA SSS SAM L24 AND L22 NOT L23

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L27 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L28 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - species).str

L29 STRUCTURE UPLOADED

=> que L29 AND L27 NOT L28

L30 QUE L29 AND L27 NOT L28

=> d l30

L30 HAS NO ANSWERS

L27 SCR 1840

L28 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L29 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L30 QUE L29 AND L27 NOT L28

=> s l30 sss sam

SAMPLE SEARCH INITIATED 14:41:00 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 14910 TO ITERATE

6.7% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 290896 TO 305504

PROJECTED ANSWERS: 0 TO 0

L31 0 SEA SSS SAM L29 AND L27 NOT L28

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L32 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L33 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - species).str

L34 STRUCTURE UPLOADED

=> que L34 AND L32 NOT L33

L35 QUE L34 AND L32 NOT L33

=> d l35

L35 HAS NO ANSWERS

L32 SCR 1840

L33 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L34 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L35 QUE L34 AND L32 NOT L33

=> s l35 sss sam

SAMPLE SEARCH INITIATED 14:42:10 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 129153 TO ITERATE

0.8% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 0

L36 0 SEA SSS SAM L34 AND L32 NOT L33

=> s l30 sss ful
FULL SEARCH INITIATED 14:42:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 301178 TO ITERATE

100.0% PROCESSED 301178 ITERATIONS
SEARCH TIME: 00.00.06

43 ANSWERS

L37 43 SEA SSS FUL L29 AND L27 NOT L28

=> s l37
L38 1 L37

=> d l38 bib,ab,hitstr

L38 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:171852 CAPLUS
 DN 136:216528
 TI Preparation of linked benzene derivatives as sodium channel modulators
 IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel;
 Turner, S. Derek
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001086965	A5	20020313	AU 2001-86965	20010830
	US 2003027822	A1	20030206	US 2001-943420	20010830
PRAI	US 2000-229572P	P	20000831		
	WO 2001-US27128	W	20010830		
OS	MARPAT 136:216528				
AB	<p>Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NRm wherein Rm = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)m, (CR5R6)w, O(CR5R6)rO, N(Rk) where m = 0-2, w = 1-3, r = 2-3; Rk = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC50 value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).</p>				
IT	<p>402759-50-6P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP</p>				

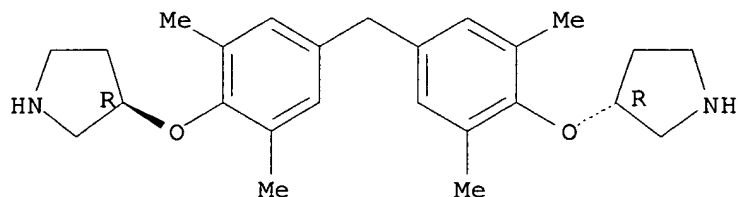
(Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

RN 402759-50-6 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (3R,3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 402759-46-0P 402759-47-1P 402759-48-2P

402759-49-3P 402759-51-7P 402759-53-9P

402759-54-0P 402759-56-2P 402759-60-8P

402759-64-2P 402759-77-7P 402759-78-8P

402759-79-9P 402759-84-6P 402759-85-7P

402759-86-8P 402759-87-9P 402759-88-0P

402759-89-1P 402759-90-4P 402759-91-5P

402759-92-6P 402759-93-7P 402759-94-8P

402760-18-3P 402760-19-4P 402760-20-7P

402760-22-9P 402760-25-2P 402760-26-3P

402760-28-5P 402760-64-9P 402760-67-2P

402760-69-4P 402760-70-7P 402760-71-8P

402760-72-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

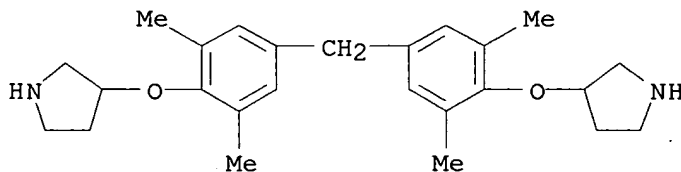
RN 402759-46-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 402759-45-9

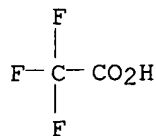
CMF C25 H34 N2 O2



CM 2

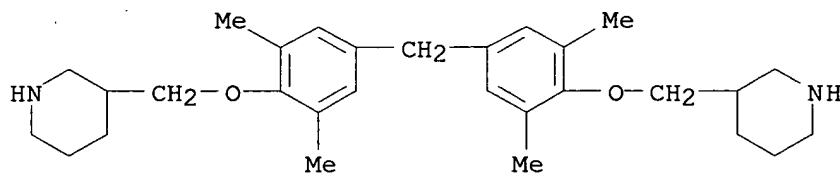
CRN 76-05-1

CMF C2 H F3 O2



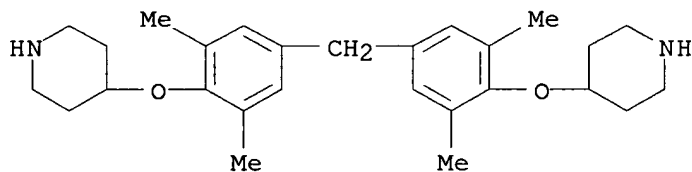
RN 402759-47-1 CAPLUS

CN Piperidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



RN 402759-48-2 CAPLUS

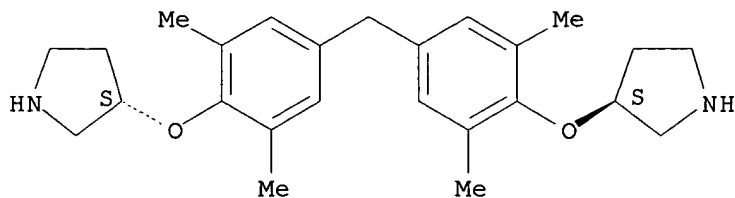
CN Piperidine, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



RN 402759-49-3 CAPLUS

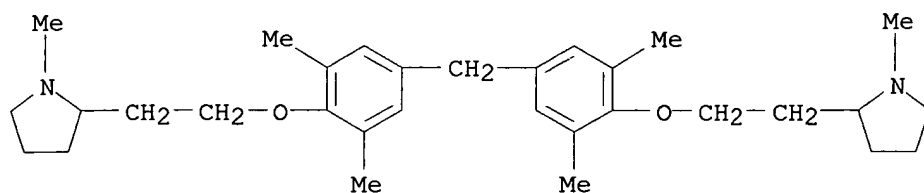
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (3S,3'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 402759-51-7 CAPLUS

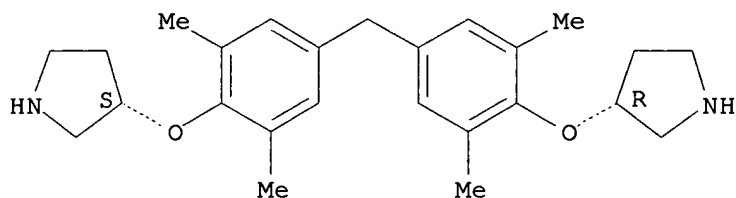
CN Pyrrolidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-53-9 CAPLUS

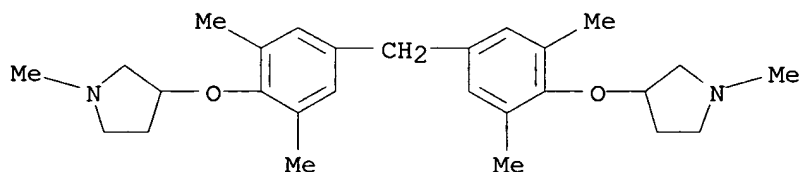
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (3R,3'S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



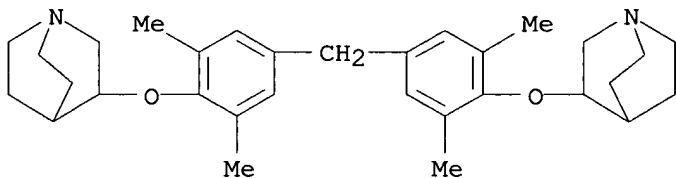
RN 402759-54-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



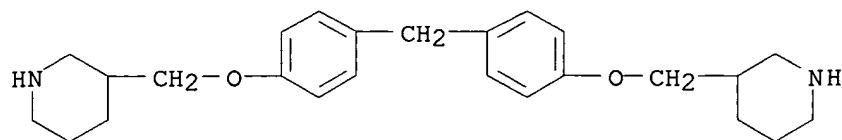
RN 402759-56-2 CAPLUS

CN 1-Azabicyclo[2.2.2]octane, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



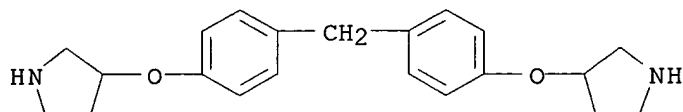
RN 402759-60-8 CAPLUS

CN Piperidine, 3,3'-[methylenebis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



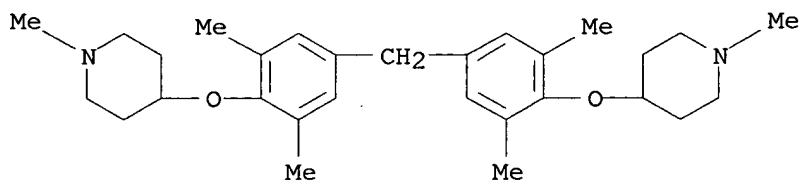
RN 402759-64-2 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



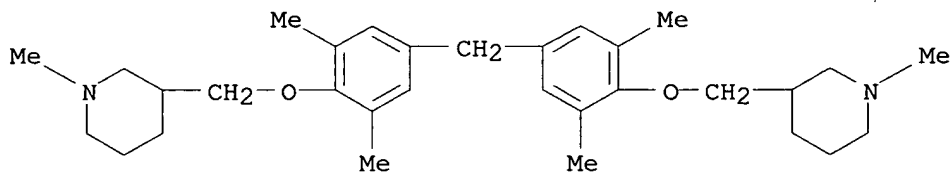
RN 402759-77-7 CAPLUS

CN Piperidine, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



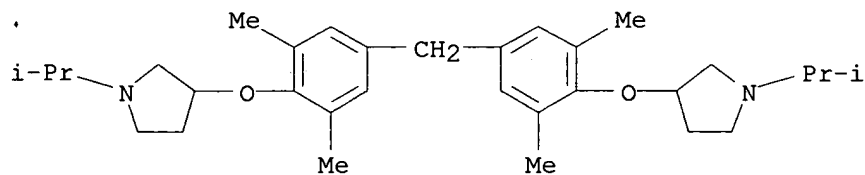
RN 402759-78-8 CAPLUS

CN Piperidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-79-9 CAPLUS

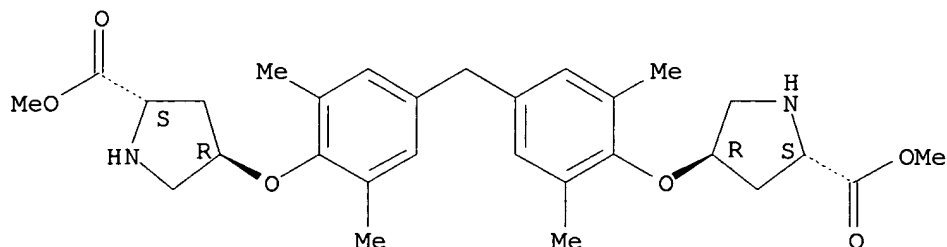
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-84-6 CAPLUS

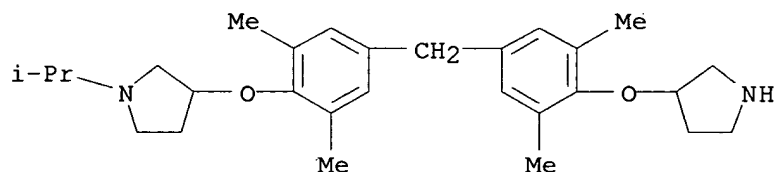
CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, dimethyl ester, (4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



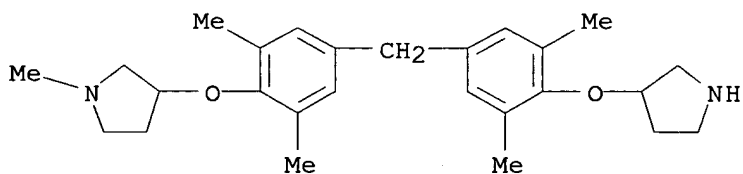
RN 402759-85-7 CAPLUS

CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-86-8 CAPLUS

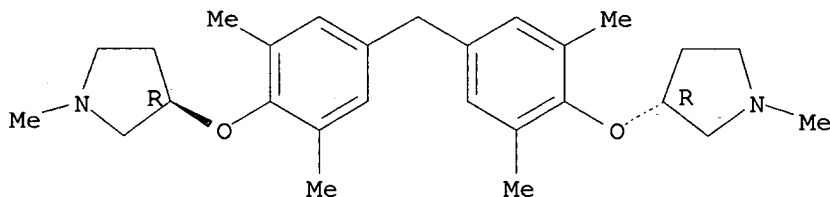
CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-methyl- (9CI) (CA INDEX NAME)



RN 402759-87-9 CAPLUS

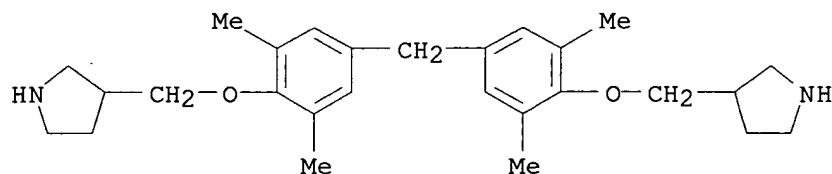
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl-, (3R,3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 402759-88-0 CAPLUS

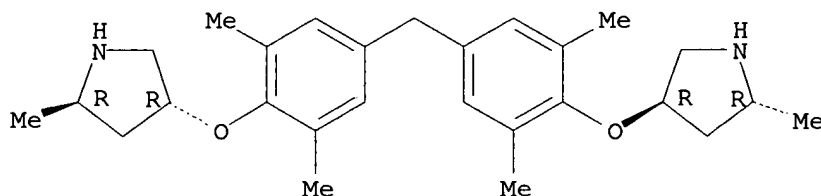
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



RN 402759-89-1 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-methyl-, (3R,3'R,5R,5'R)- (9CI) (CA INDEX NAME)

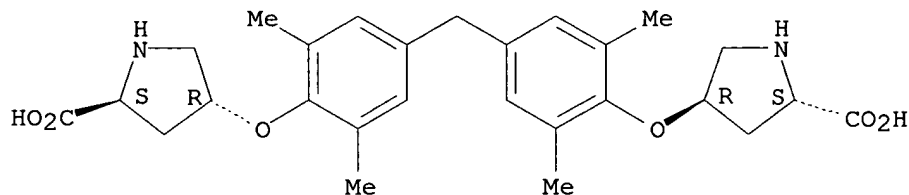
Absolute stereochemistry.



RN 402759-90-4 CAPLUS

CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (4R,4'R)- (9CI) (CA INDEX NAME)

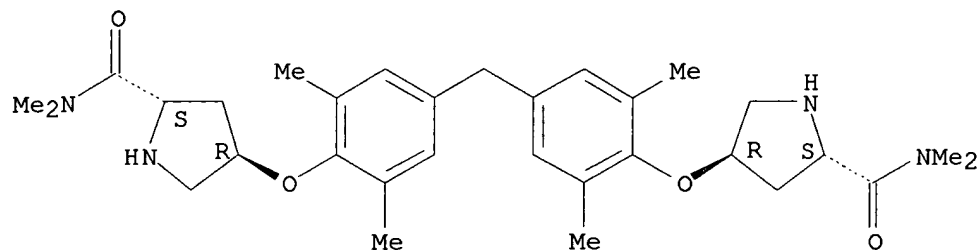
Absolute stereochemistry.



RN 402759-91-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[N,N-dimethyl-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

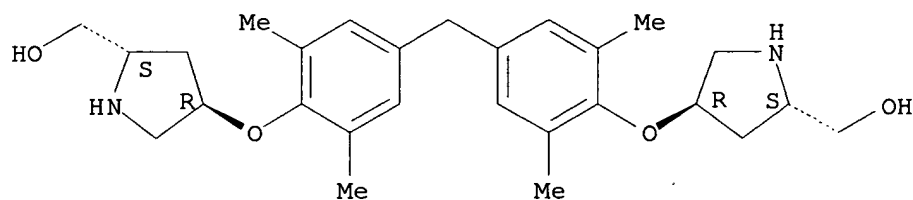
Absolute stereochemistry.



RN 402759-92-6 CAPLUS

CN 2-Pyrrolidinemethanol, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

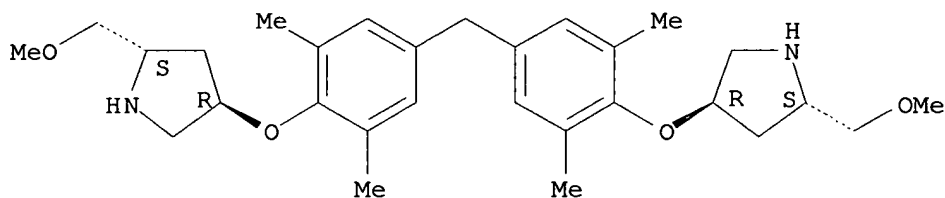
Absolute stereochemistry.



RN 402759-93-7 CAPLUS

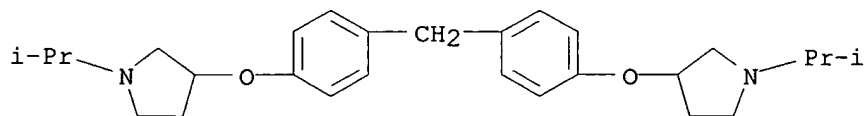
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-(methoxymethyl)-, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



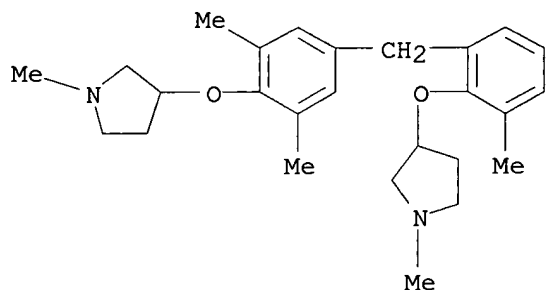
RN 402759-94-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis[1-(1-methylethyl)- (9CI) (CA INDEX NAME)



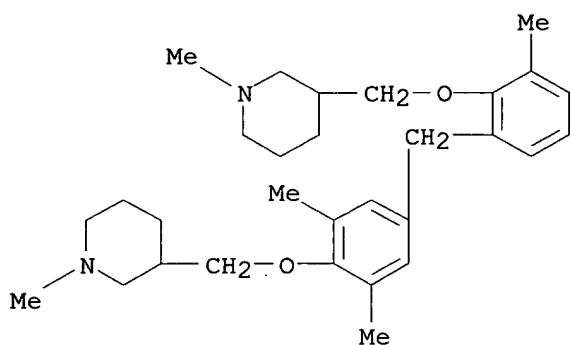
RN 402760-18-3 CAPLUS

CN Pyrrolidine, 3-[2,6-dimethyl-4-[[3-methyl-2-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]methyl]phenoxy]-1-methyl-, (9CI) (CA INDEX NAME)



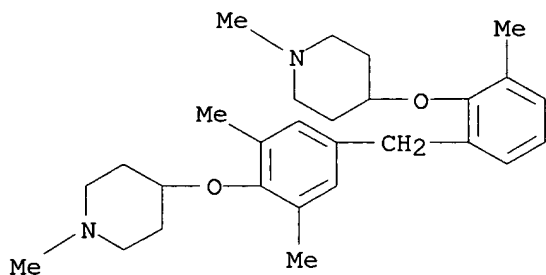
RN 402760-19-4 CAPLUS

CN Piperidine, 3-[[2,6-dimethyl-4-[[3-methyl-2-[(1-methyl-3-piperidinyl)methoxy]phenyl]methyl]phenoxy]methyl]-1-methyl- (9CI) (CA INDEX NAME)



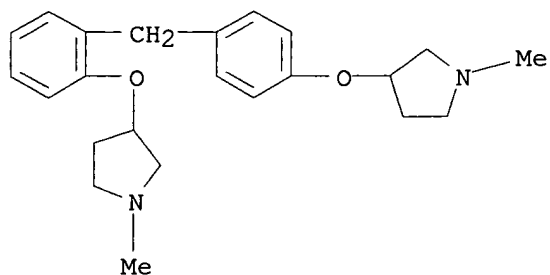
RN 402760-20-7 CAPLUS

CN Piperidine, 4-[2,6-dimethyl-4-[[3-methyl-2-[(1-methyl-4-piperidinyl)oxy]phenyl]methyl]phenoxy]-1-methyl- (9CI) (CA INDEX NAME)



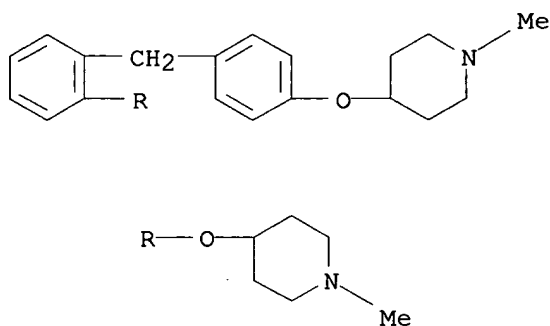
RN 402760-22-9 CAPLUS

CN Pyrrolidine, 1-methyl-3-[2-[[4-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]methyl
]phenoxy]- (9CI) (CA INDEX NAME)



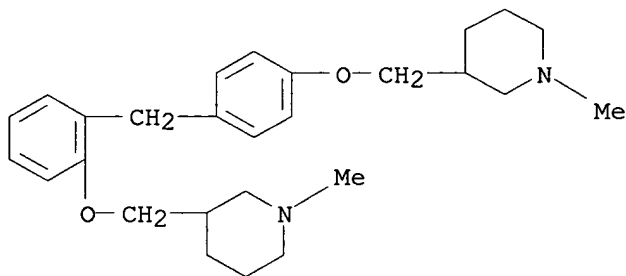
RN 402760-25-2 CAPLUS

CN Piperidine, 1-methyl-4-[2-[[4-[(1-methyl-4-piperidinyl)oxy]phenyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)



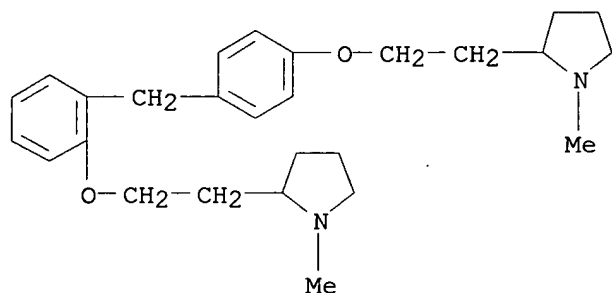
RN 402760-26-3 CAPLUS

CN Piperidine, 1-methyl-3-[[2-[[4-[(1-methyl-3-piperidinyl)methoxy]phenyl]methyl]phenoxy]methyl]- (9CI) (CA INDEX NAME)



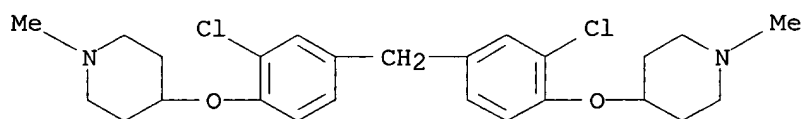
RN 402760-28-5 CAPLUS

CN Pyrrolidine, 1-methyl-2-[2-[2-[[4-[2-(1-methyl-2-pyrrolidinyl)ethoxy]phenyl]methyl]phenoxy]ethyl]- (9CI) (CA INDEX NAME)



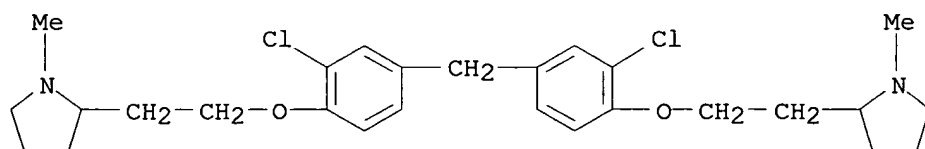
RN 402760-64-9 CAPLUS

CN Piperidine, 4,4'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



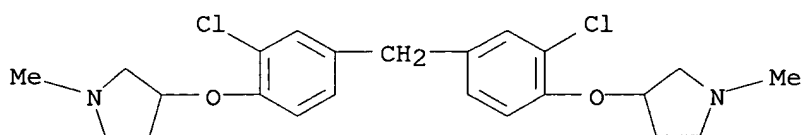
RN 402760-67-2 CAPLUS

CN Pyrrolidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



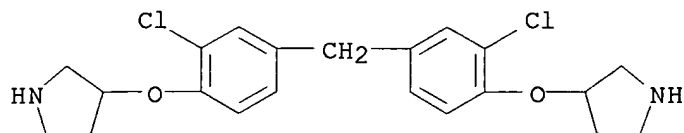
RN 402760-69-4 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)

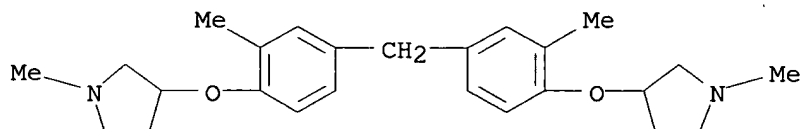


RN 402760-70-7 CAPLUS

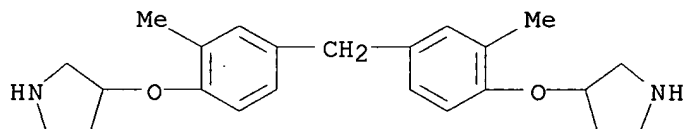
CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



RN 402760-71-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl-
(9CI) (CA INDEX NAME)

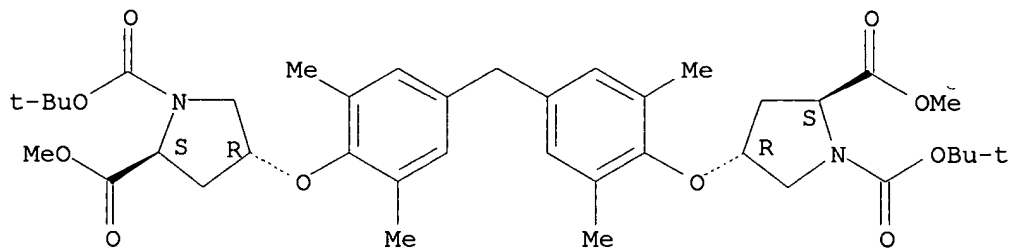
RN 402760-72-9 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis- (9CI)
(CA INDEX NAME)IT 402761-15-3P 402761-16-4P 402761-17-5P
402761-18-6PRL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)(prepn. of linked benzene derivs. via Mitsunobu reaction of linked
phenols with the requisite alc.)

RN 402761-15-3 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-
phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) 2,2'-dimethyl ester,
(2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

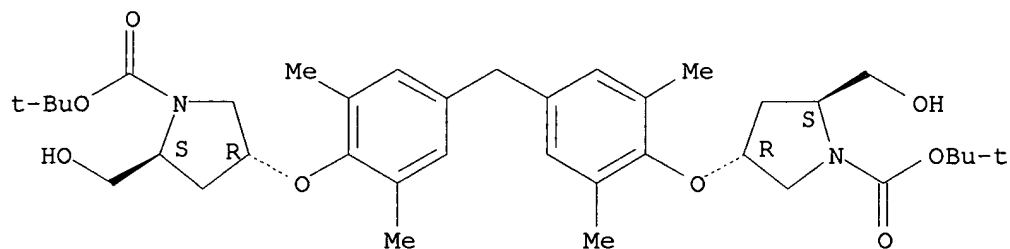


RN 402761-16-4 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-

phenylene)oxy]]bis[5-(hydroxymethyl)-, bis(1,1-dimethylethyl) ester,
(3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

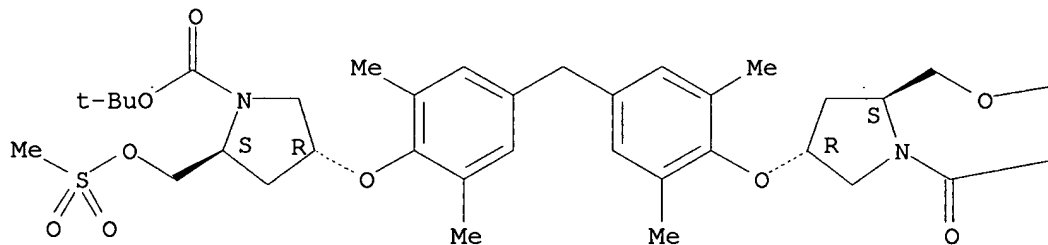


RN 402761-17-5 CAPLUS

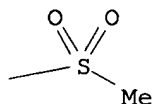
CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-[(methylsulfonyl)oxy]methyl]-, bis(1,1-dimethylethyl) ester, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

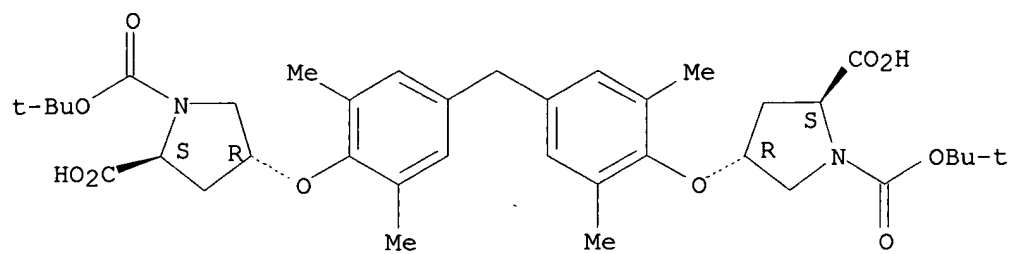


-OBu-t

RN 402761-18-6 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) ester, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L39 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L40 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - partial 2).str

L41 STRUCTURE UPLOADED

=> que L41 AND L39 NOT L40

L42 QUE L41 AND L39 NOT L40

=> d l42

L42 HAS NO ANSWERS

L39 SCR 1840

L40 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L41 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L42 QUE L41 AND L39 NOT L40

=> s l42 sss sam

SAMPLE SEARCH INITIATED 14:46:50 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 24317 TO ITERATE

4.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 477030 TO 495650

PROJECTED ANSWERS: 0 TO 0

L43 0 SEA SSS SAM L41 AND L39 NOT L40

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L44 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L45 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42 - partial 2).str

L46 STRUCTURE UPLOADED

=> que L46 AND L44 NOT L45

L47 QUE L46 AND L44 NOT L45

=> d l47

L47 HAS NO ANSWERS

L44 SCR 1840

L45 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L46 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L47 QUE L46 AND L44 NOT L45

=> s l47 sss sam

SAMPLE SEARCH INITIATED 14:48:33 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 75682 TO ITERATE

1.3% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L48 0 SEA SSS SAM L46 AND L44 NOT L45

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L49 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L50 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42, Q=0).str

L51 STRUCTURE UPLOADED

=> que L51 AND L49 NOT L50

L52 QUE L51 AND L49 NOT L50

=> d 152

L52 HAS NO ANSWERS

L49 SCR 1840

L50 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L51 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L52 QUE L51 AND L49 NOT L50

=> s 152 sss sam

SAMPLE SEARCH INITIATED 14:50:23 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 6823 TO ITERATE

14.7% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 131511 TO 141409

PROJECTED ANSWERS: 0 TO 0

L53 0 SEA SSS SAM L51 AND L49 NOT L50

=> s 152 sss ful

FULL SEARCH INITIATED 14:50:58 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 137947 TO ITERATE

100.0% PROCESSED 137947 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.04

L54 6 SEA SSS FUL L51 AND L49 NOT L50

=> s 154

L55 2 L54

=> d 155 1-2 bib,ab,hitstr

L55 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

AN 2002:171852 CAPLUS

DN 136:216528

TI Preparation of linked benzene derivatives as sodium channel modulators

IN Chinn, Jason P.; Choi, Seok-ki; Fatherree, Paul R.; Marquess, Daniel;
Turner, S. Derek

PA Advanced Medicine, Inc., USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

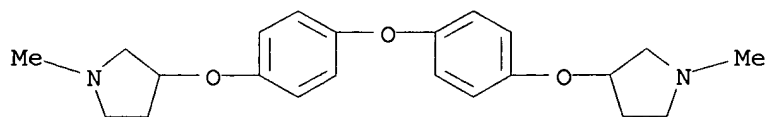
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001086965	A5	20020313	AU 2001-86965	20010830
	US 2003027822	A1	20030206	US 2001-943420	20010830
PRAI	US 2000-229572P	P	20000831		
	WO 2001-US27128	W	20010830		
OS	MARPAT 136:216528				
AB	<p>Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NR_m wherein R_m = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)_m, (CR₅R₆)_w, O(CR₅R₆)_rO, N(R_k) where m = 0-2, w = 1-3, r = 2-3; R_k = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC₅₀ value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).</p>				
IT	<p>402761-04-0P 402761-07-3P 402761-08-4P 402761-10-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU</p>				

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

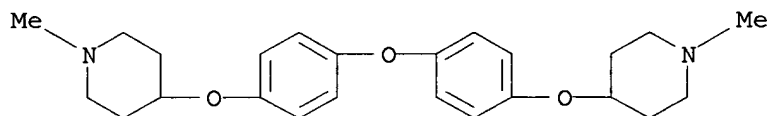
RN 402761-04-0 CAPLUS

CN Pyrrolidine, 3,3'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)]



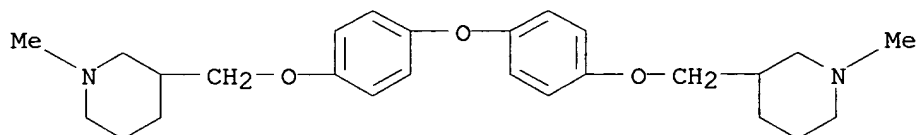
RN 402761-07-3 CAPLUS

CN Piperidine, 4,4'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)]



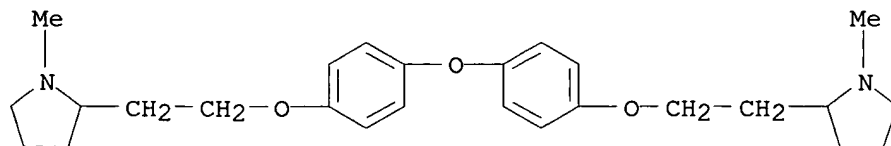
RN 402761-08-4 CAPLUS

CN Piperidine, 3,3'-[oxybis(4,1-phenyleneoxymethylene)]bis[1-methyl- (9CI) (CA INDEX NAME)]

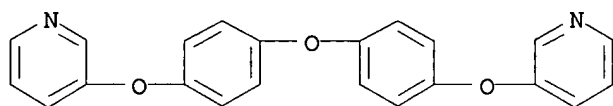


RN 402761-10-8 CAPLUS

CN Pyrrolidine, 2,2'-[oxybis(4,1-phenyleneoxy-2,1-ethanediyl)]bis[1-methyl- (9CI) (CA INDEX NAME)]



L55 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
 AN 1961:105272 CAPLUS
 DN 55:105272
 OREF 55:19741a-d
 TI Thermal stability as a function of chemical structure
 AU Blake, Edward S.; Hammann, William C.; Edwards, James W.; Reichard, Thomas E.; Ort, Morris R.
 CS Monsanto Chem. Co., Dayton, OH
 SO J. Chem. Eng. Data (1961), 6, 87-98
 DT Journal
 LA Unavailable
 AB In a search for materials with a min. thermal stability of 700.degree.F., isothermal rate pressure rises due to thermal decompn. of over 100 org. compds. were measured in a modification of Smith and Menzies' isoteniscope (cf. CA 4, 2595). Compds. of various chem. classes having the max. decompn. point (.degree.F.) were: hydrocarbons, aliphatic, octacosane 662.degree. (highly refined paraffinic mineral oil 640.degree.), aromatic, p-quaterphenyl 851.degree.; esters, sebacate, bis(1-methylcyclohexylmethyl) sebacate 623.degree., fluorinated, bis(1,1,5-trihydroperfluoroamyl) diphenate 621.degree., neopentylpolyol, 2-cyclopentamethylene-1,3-propanediol dilaurate 615.degree., phthalates, p-bis(1-methylcyclohexylmethyl) hexahydrophthalate 648.degree. (o-613.degree., m-642.degree.); amides, sebacamide 623.degree.; ethers, aliphatic and unsubstituted aromatic, m-bis(m-phenoxyphenoxy)benzene 848.degree., substituted aromatic, di(p-biphenyl) ether 858.degree.; aromatic amines, N,N,N',N'-tetraphenyl-p-phenylenediamine 856.degree.; inorg. esters, tetraphenyl silicate 844.degree.; silanes and silicones, tetra-p-biphenylsilane 810.degree.; heterocyclics, 2,4,6-triphenyl-s-triazine 867.degree.; and sulfones-ketones, bis(p-benzoylphenyl) ether 745.degree.. Conclusions were that bond strength and resonance interaction were seldom limiting factors in thermal stability, but blocking the low-energy decompn. mechanism increased the decompn. point.
 IT **112325-50-5**, Pyridine, 3,3'-[oxybis(p-phenyleneoxy)]di- (stability of)
 RN 112325-50-5 CAPLUS
 CN Pyridine, 3,3'-[oxybis(p-phenyleneoxy)]di- (6CI) (CA INDEX NAME)



=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L56 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L57 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943220 (claim 42, Q=S).str

L58 STRUCTURE UPLOADED

=> que L58 AND L56 NOT L57

L59 QUE L58 AND L56 NOT L57

=> d l59 sss sam

L59 HAS NO ANSWERS

'SSS SAM ' IS NOT A VALID STRUCTURE FORMAT KEYWORD

Structure Formats

SIA ----- Structure Image, Attributes, and map table if it contains data. (Default)

SIM ----- Structure Image.

SAT ----- Structure Attributes and map table if it contains data.

SCT ----- Structure Connection Table and map table if it contains data.

SDA ----- All Structure Data (image, attributes, connection table and map table if it contains data).

NOS ----- NO Structure data.

ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:end

=> s l59 sss sam

SAMPLE SEARCH INITIATED 14:54:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 16317 TO ITERATE

6.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 318702 TO 333978

PROJECTED ANSWERS: 0 TO 0

L60 0 SEA SSS SAM L58 AND L56 NOT L57

=> s l59 sss ful

FULL SEARCH INITIATED 14:54:48 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 331787 TO ITERATE

100.0% PROCESSED 331787 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.05

L61 6 SEA SSS FUL L58 AND L56 NOT L57

=> s 161

L62 1 L61

=> d 162 bib,ab,hitstr

L62 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:171852 CAPLUS
 DN 136:216528
 TI Preparation of linked benzene derivatives as sodium channel modulators
 IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel;
 Turner, S. Derek
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

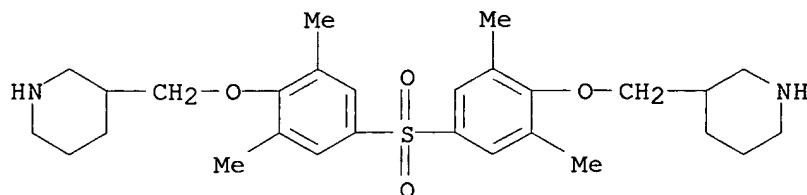
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001086965	A5	20020313	AU 2001-86965	20010830
	US 2003027822	A1	20030206	US 2001-943420	20010830
PRAI	US 2000-229572P	P	20000831		
	WO 2001-US27128	W	20010830		
OS	MARPAT 136:216528				
AB	<p>Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NRm wherein Rm = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)m, (CR5R6)w, O(CR5R6)rO, N(Rk) where m = 0-2, w = 1-3, r = 2-3; Rk = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC50 value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).</p>				
IT	<p>402759-58-4P 402759-62-0P 402759-66-4P 402759-69-7P 402759-70-0P 402759-71-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU</p>				

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

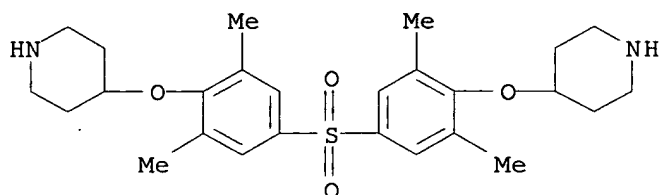
RN 402759-58-4 CAPLUS

CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



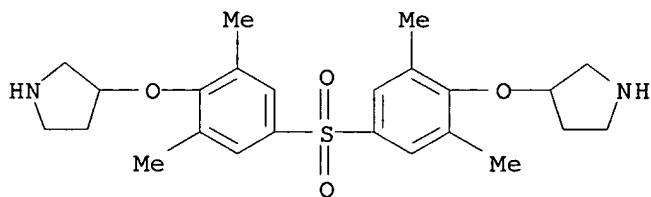
RN 402759-62-0 CAPLUS

CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



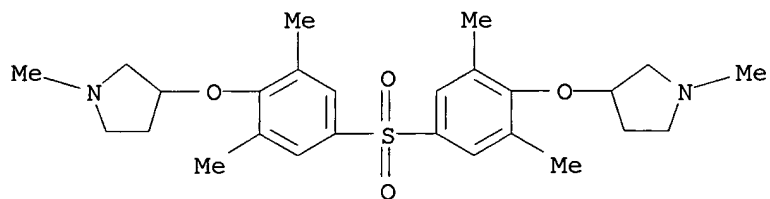
RN 402759-66-4 CAPLUS

CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



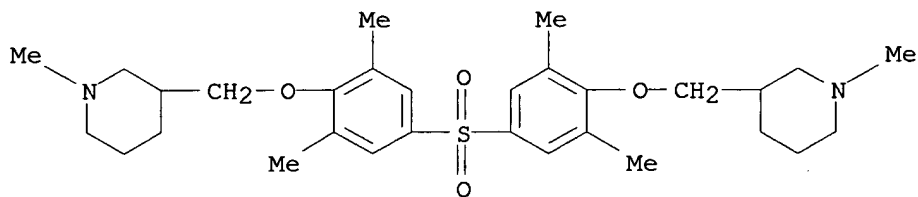
RN 402759-69-7 CAPLUS

CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



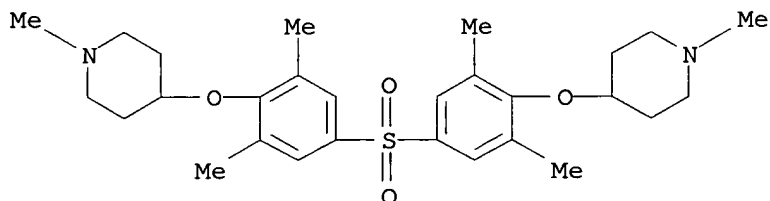
RN 402759-70-0 CAPLUS

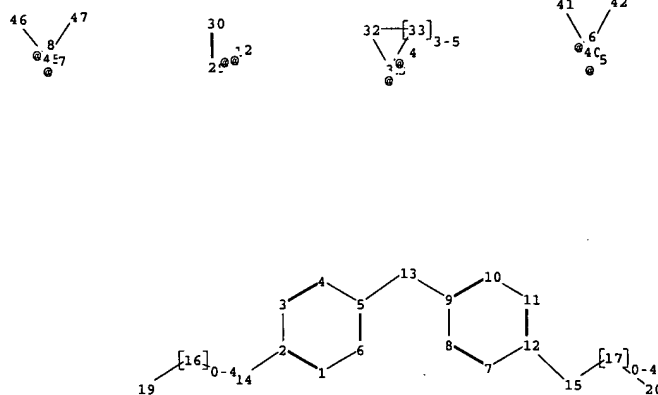
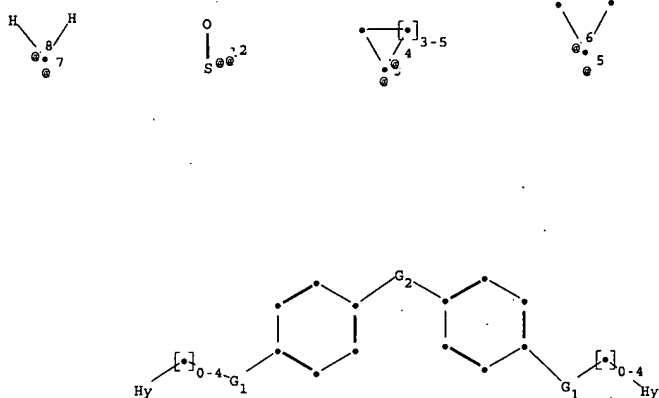
CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-71-1 CAPLUS

CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)





chain nodes :

13 14 15 16 17 19 20 29 30 40 45 46 47

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 31 32 33

ring/chain nodes :

41 42

chain bonds :

2-14 5-13 9-13 12-15 14-16 15-17 16-19 17-20 29-30 40-41 40-42 45-46 45-47

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 31-32 31-33 32-33

exact/norm bonds :

2-14 5-13 9-13 12-15 14-16 15-17 16-19 17-20 29-30

exact bonds :

31-32 31-33 32-33 40-41 40-42 45-46 45-47

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 1 : 7 : 31 :

G1:O,N

G2:O,S,N,SO2, [*1-*2], [*3-*4], [*5-*6], [*7-*8]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 29:CLASS
 30:CLASS 31:Atom 32:Atom 33:Atom 40:CLASS 41:CLASS 42:CLASS 45:CLASS 46:CLASS
 47:CLASS

Generic attributes :

19:

Saturation : Saturated

Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic
20:
Saturation : Saturated
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

Element Count :

Node 19: Limited

N,N1

C,C3

O,O0

S,S0

Node 20: Limited

N,N1

C,C3

O,O0

S,S0

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L1 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L2 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 q=o).str

L3 STRUCTURE UPLOADED

=> que L3 AND L1 NOT L2

L4 QUE L3 AND L1 NOT L2

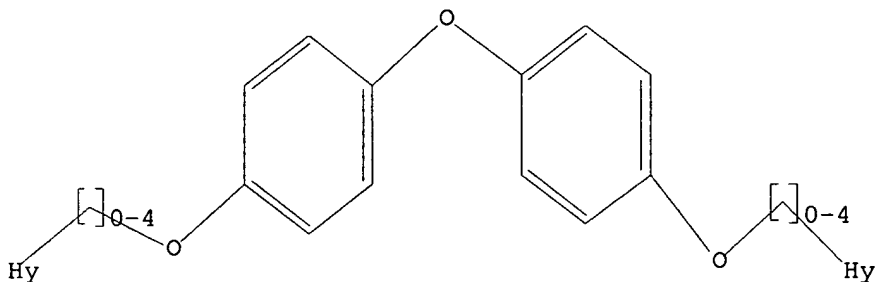
=> d l4

L4 HAS NO ANSWERS

L1 SCR 1841

L2 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L3 STR



Structure attributes must be viewed using STN Express query preparation.

L4 QUE L3 AND L1 NOT L2

=> s l4 sss sam

SAMPLE SEARCH INITIATED 18:00:00 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9108 TO ITERATE

11.0% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 176445 TO 187875

PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L3 AND L1 NOT L2

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L6 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L7 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 q=o).str

L8 STRUCTURE UPLOADED

=> que L8 AND L6 NOT L7

L9 QUE L8 AND L6 NOT L7

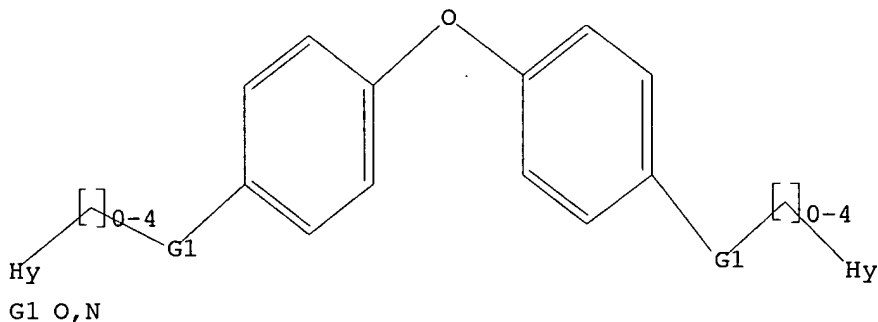
=> d 19

L9 HAS NO ANSWERS

L6 SCR 1841

L7 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L8 STR



Structure attributes must be viewed using STN Express query preparation.

L9 QUE L8 AND L6 NOT L7

=> s 19 sss sam

SAMPLE SEARCH INITIATED 18:00:58 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9234 TO ITERATE

10.8% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 178926 TO 190434

PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L8 AND L6 NOT L7

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L11 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L12 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L13 STRUCTURE UPLOADED

=> que L13 AND L11 NOT L12

L14 QUE L13 AND L11 NOT L12

=> d l14

L14 HAS NO ANSWERS

L11 SCR 1841

L12 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L13 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L14 QUE L13 AND L11 NOT L12

=> s l14 sss sam

SAMPLE SEARCH INITIATED 18:03:53 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 20294 TO ITERATE

4.9% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 397368 TO 414392

PROJECTED ANSWERS: 0 TO 0

L15 0 SEA SSS SAM L13 AND L11 NOT L12

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L16 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 1304

L17 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L18 STRUCTURE UPLOADED

=> que L18 AND L16 NOT L17

L19 QUE L18 AND L16 NOT L17

=> d l19

L19 HAS NO ANSWERS

L16 SCR 1841

L17 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O
R 1304

L18 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L19 QUE L18 AND L16 NOT L17

=> s l19 sss sam

SAMPLE SEARCH INITIATED 18:05:43 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19676 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 385138 TO 401902
PROJECTED ANSWERS: 0 TO 0

L20 0 SEA SSS SAM L18 AND L16 NOT L17

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L21 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2079

L22 SCREEN CREATED

=>

09/943,420 (claim 43 - incomplete)

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L23 STRUCTURE UPLOADED

=> que L23 AND L21 NOT L22

L24 QUE L23 AND L21 NOT L22

=> d l24

L24 HAS NO ANSWERS

L21 SCR 1841

L22 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O
R 2079

L23 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L24 QUE L23 AND L21 NOT L22

=> s l24 sss sam

SAMPLE SEARCH INITIATED 18:07:07 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 18897 TO ITERATE

5.3% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 369724 TO 386156

PROJECTED ANSWERS: 0 TO 0

L25 0 SEA SSS SAM L23 AND L21 NOT L22

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L26 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L27 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L28 STRUCTURE UPLOADED

=> que L28 AND L26 NOT L27

L29 QUE L28 AND L26 NOT L27

=> d 129

L29 HAS NO ANSWERS

L26 SCR 1841

L27 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L28 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L29 QUE L28 AND L26 NOT L27

=> s 129 sss sam

SAMPLE SEARCH INITIATED 18:08:10 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19769 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 386978 TO 403782

PROJECTED ANSWERS: 0 TO 0

L30 0 SEA SSS SAM L28 AND L26 NOT L27

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L31 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L32 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L33 STRUCTURE UPLOADED

=> que L33 AND L31 NOT L32

L34 QUE L33 AND L31 NOT L32

=> d 134

L34 HAS NO ANSWERS

L31 SCR 1841 AND 1993

L32 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L33 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L34 QUE L33 AND L31 NOT L32

=> s l34 sss sam

SAMPLE SEARCH INITIATED 18:09:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 14309 TO ITERATE

7.0% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 279024 TO 293336
PROJECTED ANSWERS: 0 TO 0

L35 0 SEA SSS SAM L33 AND L31 NOT L32

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L36 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L37 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L38 STRUCTURE UPLOADED

=> que L38 AND L36 NOT L37

L39 QUE L38 AND L36 NOT L37

=> d l39

L39 HAS NO ANSWERS

L36 SCR 1841 AND 1993

L37 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L38 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L39 QUE L38 AND L36 NOT L37

=> s l39 sss sam

SAMPLE SEARCH INITIATED 18:11:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 24113 TO ITERATE

4.1% PROCESSED 1000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 472989 TO 491531
PROJECTED ANSWERS: 188 TO 776

L40 1 SEA SSS SAM L38 AND L36 NOT L37

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L41 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L42 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L43 STRUCTURE UPLOADED

=> que L43 AND L41 NOT L42

L44 QUE L43 AND L41 NOT L42

=> d l44

L44 HAS NO ANSWERS

L41 SCR 1841 AND 1993

L42 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L43 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L44 QUE L43 AND L41 NOT L42

=> s l44 sss sam

SAMPLE SEARCH INITIATED 18:13:37 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 24113 TO ITERATE

4.1% PROCESSED 1000 ITERATIONS

1 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 472989 TO 491531
PROJECTED ANSWERS: 188 TO 776

L45 1 SEA SSS SAM L43 AND L41 NOT L42

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L46 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L47 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L48 STRUCTURE UPLOADED

=> que L48 AND L46 NOT L47

L49 QUE L48 AND L46 NOT L47

=> d l49

L49 HAS NO ANSWERS

L46 SCR 1841 AND 1993

L47 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241

L48 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L49 QUE L48 AND L46 NOT L47

=> s l49 sss sam

SAMPLE SEARCH INITIATED 18:15:45 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 23379 TO ITERATE

4.3% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 458450 TO 476710

PROJECTED ANSWERS: 177 TO 757

L50 1 SEA SSS SAM L48 AND L46 NOT L47

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L51 SCREEN CREATED

09/943,420 (claim 43 - incomplete)

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR 2068

L52 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L53 STRUCTURE UPLOADED

=> que L53 AND L51 NOT L52

L54 QUE L53 AND L51 NOT L52

=> d 154

L54 HAS NO ANSWERS

L51 SCR 1841 AND 1993

L52 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR 2068

L53 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L54 QUE L53 AND L51 NOT L52

=> s 154 sss sam

SAMPLE SEARCH INITIATED 18:17:25 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 21100 TO ITERATE

4.7% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 413322 TO 430678

PROJECTED ANSWERS: 0 TO 0

L55 0 SEA SSS SAM L53 AND L51 NOT L52

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L56 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR 2068 OR 2069 OR 2070

L57 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L58 STRUCTURE UPLOADED

=> que L58 AND L56 NOT L57

L59 QUE L58 AND L56 NOT L57

=> d l59

L59 HAS NO ANSWERS

L56 SCR 1841 AND 1993

L57 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O
R 2043 OR 2068 OR 2069 OR 2070

L58 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L59 QUE L58 AND L56 NOT L57

=> s l59 sss sam

SAMPLE SEARCH INITIATED 18:18:27 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 21100 TO ITERATE

4.7% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 413322 TO 430678

PROJECTED ANSWERS: 0 TO 0

L60 0 SEA SSS SAM L58 AND L56 NOT L57

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L61 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR
2068 OR 2069 OR 2070 OR 1719 OR 1664

L62 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L63 STRUCTURE UPLOADED

=> que L63 AND L61 NOT L62

L64 QUE L63 AND L61 NOT L62

=> d 164

L64 HAS NO ANSWERS

L61 SCR 1841 AND 1993

L62 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O

R 2043 OR 2068 OR 2069 OR 2070 OR 1719 OR 1664

L63 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L64 QUE L63 AND L61 NOT L62

=> s 164 sss sam

SAMPLE SEARCH INITIATED 18:20:37 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 20919 TO ITERATE

4.8% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 409739 TO 427021

PROJECTED ANSWERS: 0 TO 0

L65 0 SEA SSS SAM L63 AND L61 NOT L62

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L66 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR
2068 OR 2069 OR 2070 OR 1719 OR 1664 OR 2067 OR 1771

L67 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L68 STRUCTURE UPLOADED

=> que L68 AND L66 NOT L67

L69 QUE L68 AND L66 NOT L67

=> d 169

L69 HAS NO ANSWERS

L66 SCR 1841 AND 1993

L67 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O

R 2043 OR 2068 OR 2069 OR 2070 OR 1719 OR 1664 OR 2067 OR 1771

L68 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L69 QUE L68 AND L66 NOT L67

=> s l69 sss sam

SAMPLE SEARCH INITIATED 18:22:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 20888 TO ITERATE

4.8% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 409126 TO 426394

PROJECTED ANSWERS: 0 TO 0

L70 0 SEA SSS SAM L68 AND L66 NOT L67

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841 AND 1993

L71 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 OR 2043 OR
2068 OR 2069 OR 2070 OR 1719 OR 1664 OR 2067 OR 1771 OR 1334

L72 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (claim 43 partial).str

L73 STRUCTURE UPLOADED

=> que L73 AND L71 NOT L72

L74 QUE L73 AND L71 NOT L72

=> d l74

L74 HAS NO ANSWERS

L71 SCR 1841 AND 1993

L72 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 1241 O
R 2043 OR 2068 OR 2069 OR 2070 OR 1719 OR 1664 OR 2067 OR 1771 OR 1334

L73 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L74 QUE L73 AND L71 NOT L72

=> s l74 sss sam

09/943,420 (claim 43 - incomplete)

SAMPLE SEARCH INITIATED 18:24:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 20888 TO ITERATE

4.8% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 409126 TO 426394
PROJECTED ANSWERS: 0 TO 0

L75 0 SEA SSS SAM L73 AND L71 NOT L72

=> s 174 sss ful

FULL SEARCH INITIATED 18:24:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 415943 TO ITERATE

96.2% PROCESSED 400000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.12

143 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 415943 TO 415943
PROJECTED ANSWERS: 143 TO 184

L76 143 SEA SSS FUL L73 AND L71 NOT L72

=> s 176

L77 86 L76

=> d 177 1-86 bib,ab,hitstr

L77 ANSWER 1 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 2003:216826 CAPLUS

DN 138:222381

TI Modified glass fiber cords for reinforcement of plastics or rubbers and coupling agents therefor

IN Monden, Toshiya; Hyakutake, Hiroyuki; Komori, Akira

PA Central Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003081662	A2	20030319	JP 2001-269832	20010906
PRAI	JP 2001-269832		20010906		

AB The cords are modified on surface with coupling agents comprising nitrile rubber, blocked isocyanate aq. dispersions (solids) 2-15, and epoxy resin aq. dispersions (solids) 4-10 phr to show good adhesion to plastics and rubbers, esp. thermoplastic polyurethanes. Thus, an aluminosilicate glass fiber strand was dipped in an ammonia alk. soln. of Nipol 1562 (nitrile rubber), Nipol 1571 (carboxy-contg. nitrile rubber), DM 30 (.epsilon.-caprolactam-blocked MDI), and Epoliquor R 105 (epoxy resin) and twisted to give a cord. The cord was embedded in T 1190 (urethane rubber) upon hot pressing and showed peeling resistance 13 kg/25 mm.

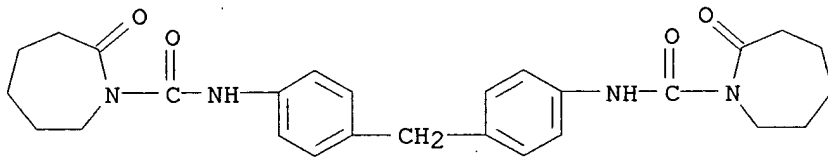
IT 54112-23-1, DM 30

RL: MOA (Modifier or additive use); USES (Uses)

(coupling agents; surface-modified glass fiber cords for reinforcement of plastics or rubbers and coupling agents therefor)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 2 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:570307 CAPLUS
 DN 137:136980
 TI New medicine for photochemical therapy
 IN Kitagawa, Masayuki; Hiratsuka, Shoji
 PA Nippon Kayaku Co., Ltd., Japan; Senko Medical Instrument Mfg. Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002212066	A2	20020731	JP 2001-15334	20010124
PRAI	JP 2001-15334		20010124		
OS	MARPAT 137:136980				

AB The invention provided superior water sol. and highly tissue binding affinity medicine of photochem. therapy whose general structure (I; preferably ring A and B having substituent groups, at least one from R1 to R8 whose general structure ((E)(X)(D); preferably E having hydrocarbon chain of value 2 substituent such as (poly)methylene etc., D having alkoxyl group at its amino group as substituent such as alkoxyl amino ring group etc., and X having carbonyl and sulfonyl group) with preferably the remain hydrogen atom being substituted by hydrocarbon group, and m is integer of 1 or 2), e.g. tetrakis-aminophenyl phenylenediamine or tetrakis-aminophenyl diphenylene diamine derivs. and their salts.

IT **438206-79-2P**

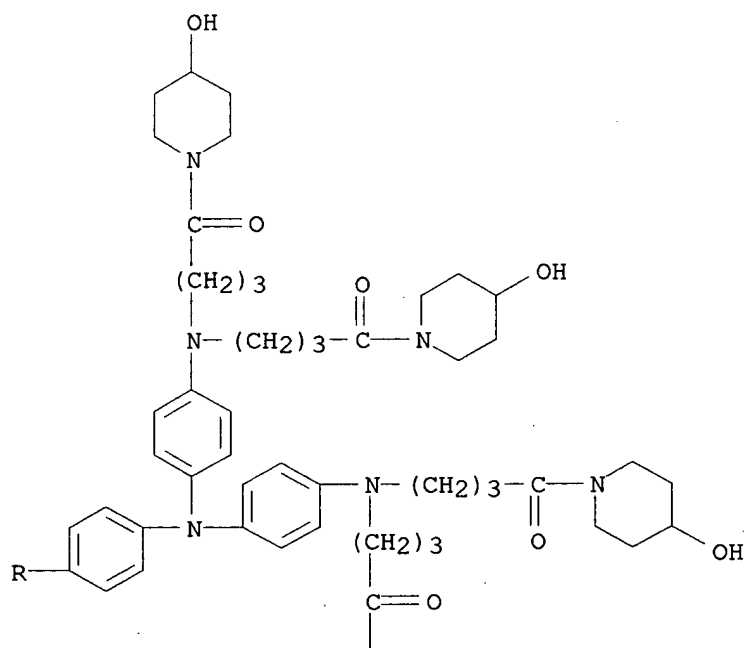
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(aminophenyl phenylenediamine derivs. as new medicines for photochem. therapy)

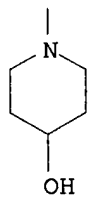
RN 438206-79-2 CAPLUS

CN 4-Piperidinol, 1,1',1'',1''',1'''',1'''''',1''''''',1''''''''-[1,4-phenylenebis[nitrilobis[4,1-phenylenenitrilobis(1-oxo-4,1-butanediyl)]]]octakis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L77 ANSWER 3 OF 86 CAPLUS COPYRIGHT 2003 ACS
AN 2002:464167 CAPLUS
DN 137:41723
TI Tetrakis(aminophenyl)(di)phenylenediamines and their solutions for
photochemotherapy
IN Kitagawa, Masayuki; Hiratsuka, Shoji; Kitayama, Yasuyuki; Ichikawa,
Yuichiro; Ekimoto, Hisao
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002173474	A2	20020621	JP 2000-368571	20001204
PRAI	JP 2000-368571		20001204		
OS	MAREPAT 137:41723				

AB Title compds. I [ring A, B may have substituent; .gtoreq.1 of R1-R8 = EXD; E = (un)substituted hydrocarbylene; D = (un)substituted amino, alkoxy; X = CO, SO2; other R1-R8 = H, CO2H- or SO3H-substituted hydrocarbyl; m = 1, 2] or their salts are claimed. I show efficient IR absorption, good water soly., and high tissue affinity. I [R1-R8 = (CH2)3CO2H, m = 1] was amidated by morpholine to give I [R1-R8 = (CH2)3COQ; Q = morpholino; m = 1], which was administered to mice at 30 mg/kg and irradiated by laser beam to show 56% treatment of colon cancer.

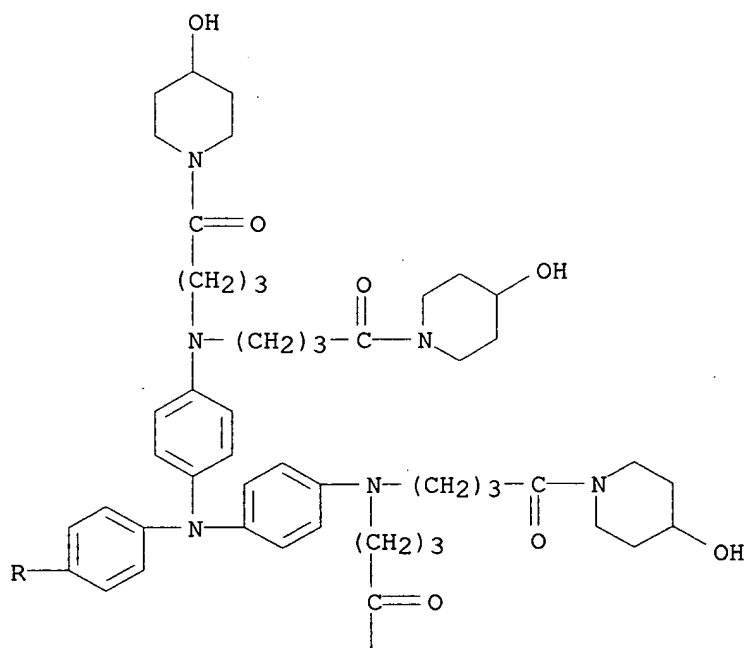
IT **438206-79-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

```
(prepn. of tetrakis(aminophenyl)(di)phenylenediamines for
photochemotherapy)
```

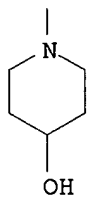
RN 438206-79-2 CAPLUS

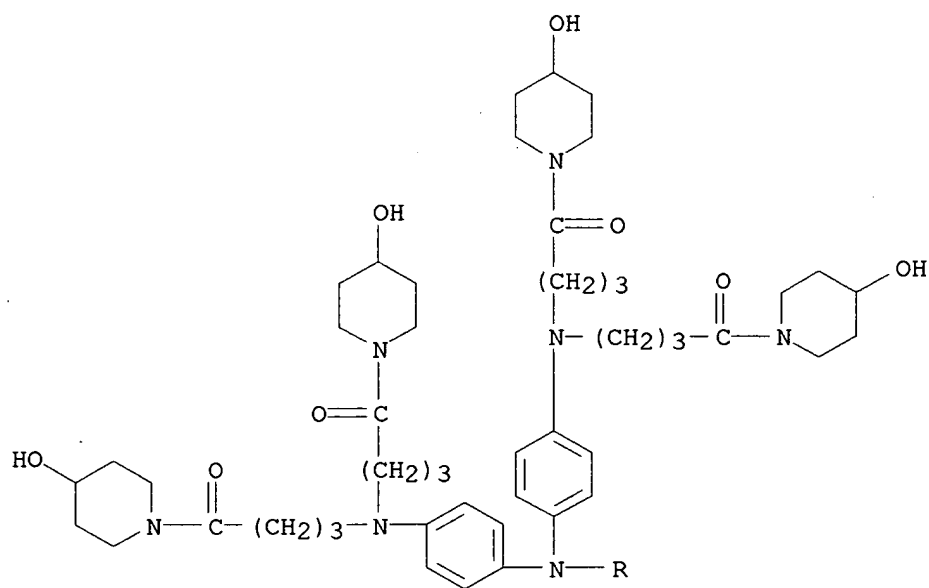
CN 4-Piperidinol, 1,1',1'',1''',1'''',1''''',1''''',1''''''-[1,4-phenylenebis[nitrilobis[4,1-phenylenenitrilobis(1-oxo-4,1-butanediyl)]]]]octakis- (9CI) (CA INDEX NAME)

PAGE 1-A

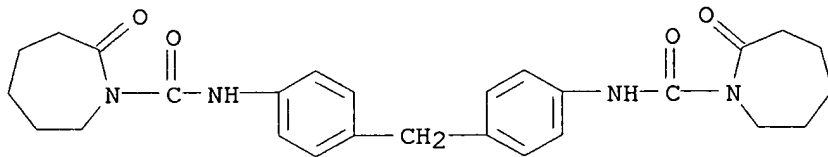


PAGE 2-A





L77 ANSWER 4 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:209154 CAPLUS
 DN 137:109812
 TI Degradation reaction of thermoplastic polyurethane for analysis of the NCO content
 AU Ohhama, Yoshino; Katsumata, Hideyuki; Kaneco, Satoshi; Suzuki, Tohru; Ohta, Kiyohisa; Yoshida, Tsutomu; Yoshikawa, Jyunichi
 CS BASF Polyurethane Elastomers, Ltd., Mie, 510-0011, Japan
 SO ITE Letters on Batteries, New Technologies & Medicine (2001), 2(6), 821-824
 CODEN: ILBMF9
 PB ITE-IBA Publication Office
 DT Journal
 LA English
 AB Titrimetric method was proposed for the detn. of the NCO content in thermoplastic polyurethane (TPU) contg. diphenylmethanebis(4,4'-carbamoyl-epsilon-caprolactam) (DMCC) based on a chem. degrdn. reaction with cyclohexanone. The theor. value of the NCO content in the TPU is 17.6 %. The optimal degrdn. temp. and time were 155.degree.C and 2.3 h, resp. Under these conditions, the NCO content in the dry blend of the TPU with DMCC obtained by the present method was in agreement with the theor. value. Furthermore, this method was applied to the real samples which were extrusions of the TPU with DMCC. The values of the NCO contents detected were improved compared with those obtained by differential scanning calorimetric (DSC) anal.
 IT 54112-23-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (chem. degrdn. of thermoplastic polyurethane with cyclohexanone for anal. of NCO content)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 5 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:171852 CAPLUS
 DN 136:216528
 TI Preparation of linked benzene derivatives as sodium channel modulators
 IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel;
 Turner, S. Derek
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
 US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2001086965	A5	20020313	AU 2001-86965	20010830
	US 2003027822	A1	20030206	US 2001-943420	20010830
PRAI	US 2000-229572P	P	20000831		
	WO 2001-US27128	W	20010830		

OS MARPAT 136:216528

AB Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NR_m wherein R_m = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)_m, (CR₅R₆)_w, O(CR₅R₆)_rO, N(R_k) where m = 0-2, w = 1-3, r = 2-3; R_k = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC₅₀ value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).

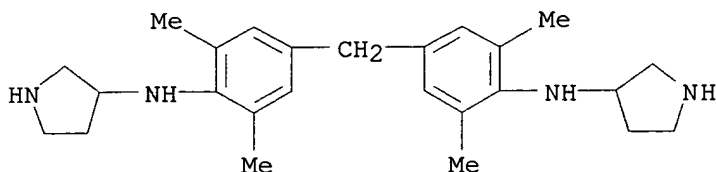
IT 402760-60-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked aniline with the requisite alc.)

RN 402760-60-5 CAPLUS

CN 3-Pyrrolidinamine, N,N'-[methylenebis(2,6-dimethyl-4,1-phenylene)]bis-
(9CI) (CA INDEX NAME)

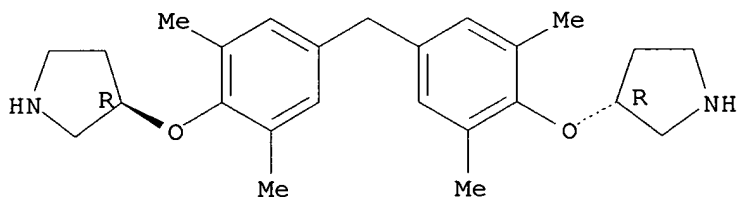
IT 402759-50-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

RN 402759-50-6 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-,
(3R,3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

*Elected species.*

IT 402759-46-0P 402759-47-1P 402759-48-2P
 402759-49-3P 402759-51-7P 402759-52-8P
 402759-53-9P 402759-54-0P 402759-55-1P
 402759-57-3P 402759-58-4P 402759-59-5P
 402759-60-8P 402759-61-9P 402759-62-0P
 402759-63-1P 402759-64-2P 402759-65-3P
 402759-66-4P 402759-67-5P 402759-68-6P
 402759-69-7P 402759-70-0P 402759-71-1P
 402759-77-7P 402759-78-8P 402759-79-9P
 402759-80-2P 402759-84-6P 402759-85-7P
 402759-86-8P 402759-87-9P 402759-88-0P
 402759-89-1P 402759-90-4P 402759-91-5P
 402759-92-6P 402759-93-7P 402759-94-8P
 402759-95-9P 402760-00-3P 402760-01-4P
 402760-03-6P 402760-04-7P 402760-05-8P
 402760-64-9P 402760-66-1P 402760-67-2P
 402760-68-3P 402760-69-4P 402760-70-7P
 402760-71-8P 402760-72-9P 402761-04-0P
 402761-07-3P 402761-08-4P 402761-09-5P
 402761-10-8P 402761-11-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

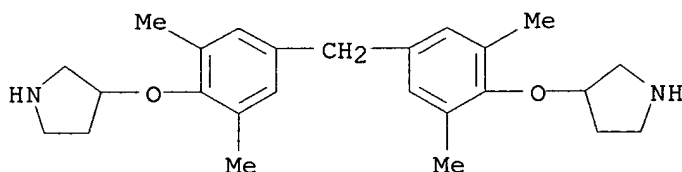
RN 402759-46-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 402759-45-9

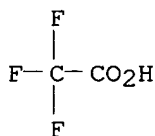
CMF C25 H34 N2 O2



CM 2

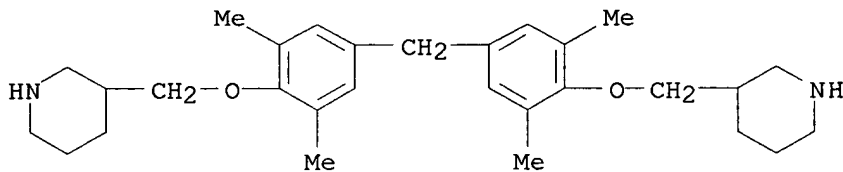
CRN 76-05-1

CMF C2 H F3 O2



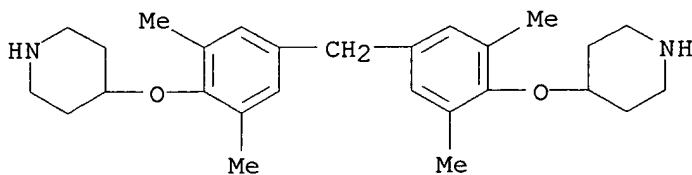
RN 402759-47-1 CAPLUS

CN Piperidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



RN 402759-48-2 CAPLUS

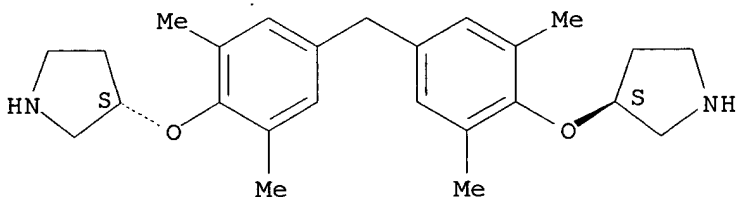
CN Piperidine, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



RN 402759-49-3 CAPLUS

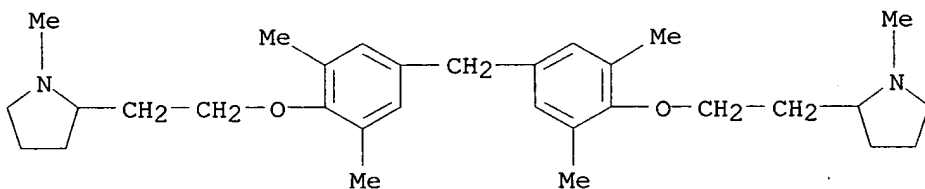
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-,
(3S,3'S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



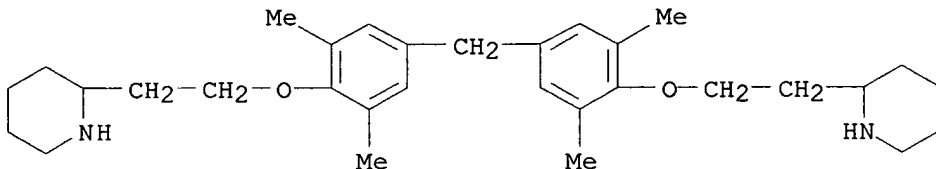
RN 402759-51-7 CAPLUS

CN Pyrrolidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-52-8 CAPLUS

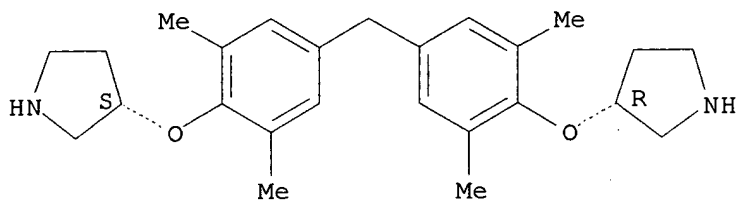
CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis- (9CI) (CA INDEX NAME)



RN 402759-53-9 CAPLUS

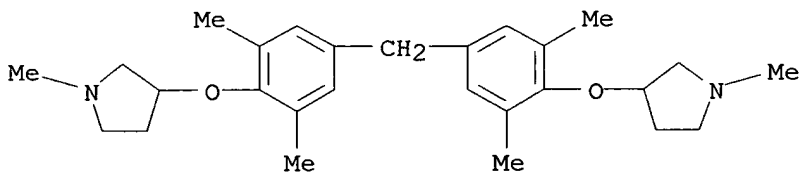
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-,
(3R,3'S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



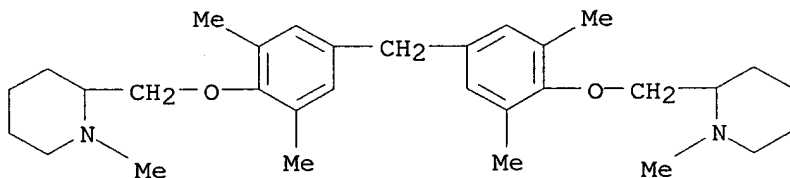
RN 402759-54-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



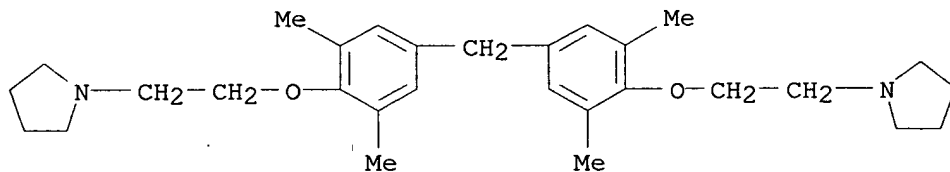
RN 402759-55-1 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



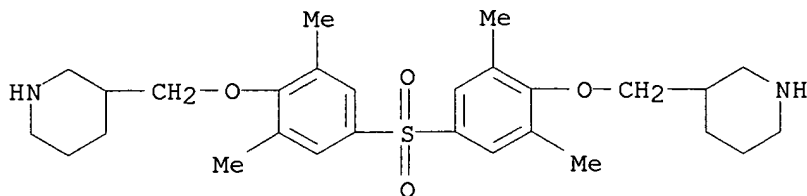
RN 402759-57-3 CAPLUS

CN Pyrrolidine, 1,1'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis- (9CI) (CA INDEX NAME)



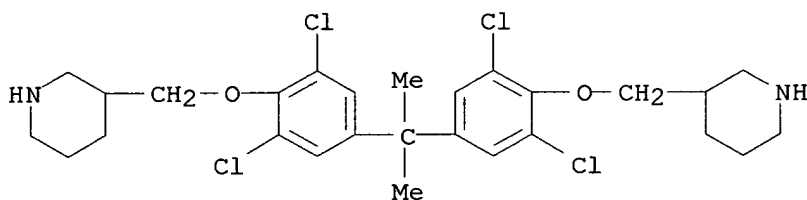
RN 402759-58-4 CAPLUS

CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



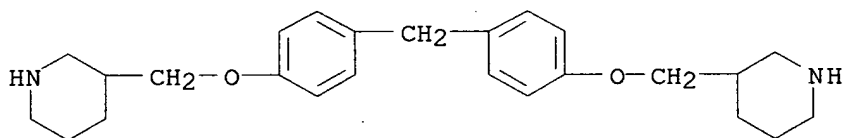
RN 402759-59-5 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2,6-dichloro-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



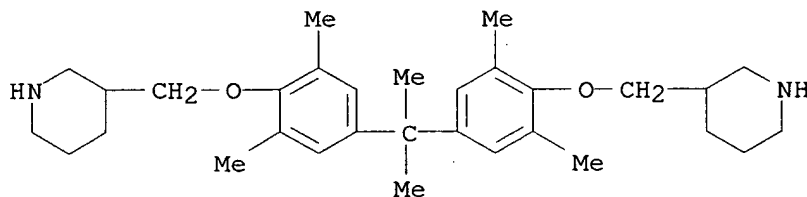
RN 402759-60-8 CAPLUS

CN Piperidine, 3,3'-[methylenebis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



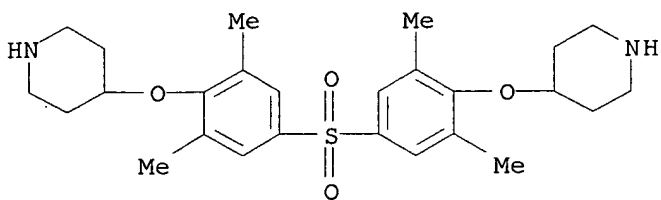
RN 402759-61-9 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)

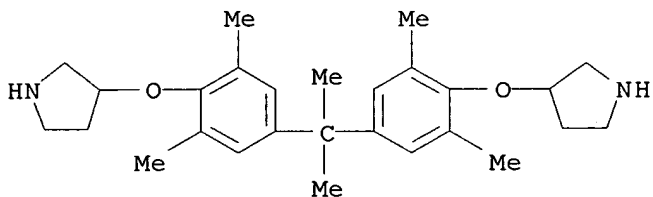


RN 402759-62-0 CAPLUS

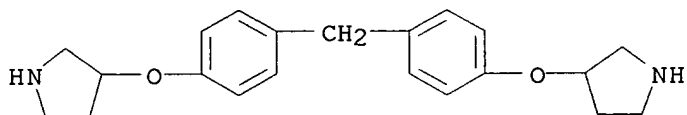
CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



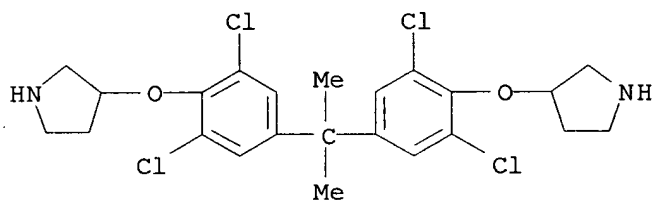
RN 402759-63-1 CAPLUS
 CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



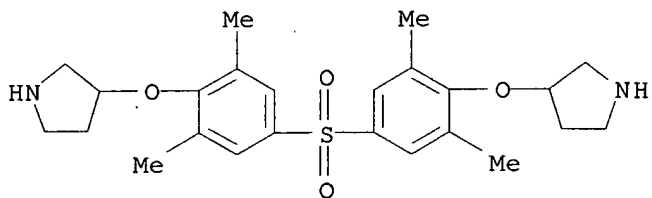
RN 402759-64-2 CAPLUS
 CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



RN 402759-65-3 CAPLUS
 CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dichloro-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)

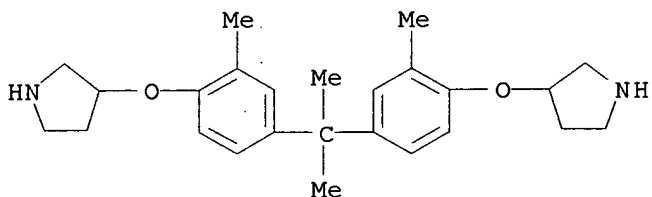


RN 402759-66-4 CAPLUS
 CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



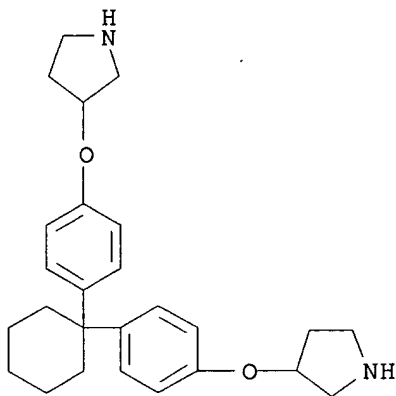
RN 402759-67-5 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis- (9CI) (CA'INDEX NAME)



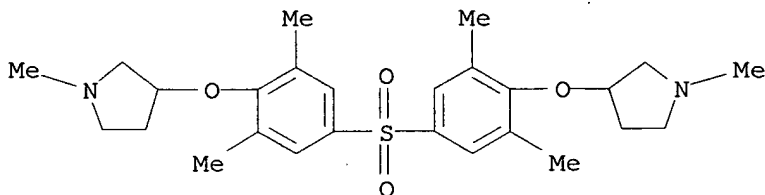
RN 402759-68-6 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



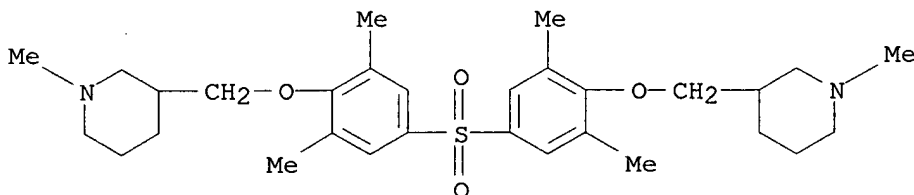
RN 402759-69-7 CAPLUS

CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



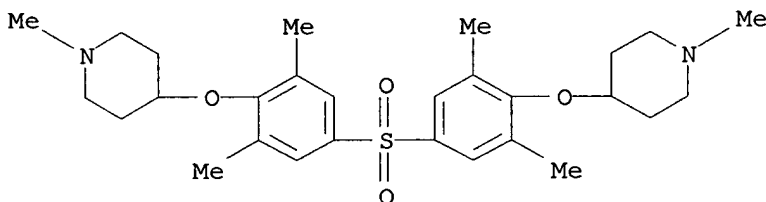
RN 402759-70-0 CAPLUS

CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



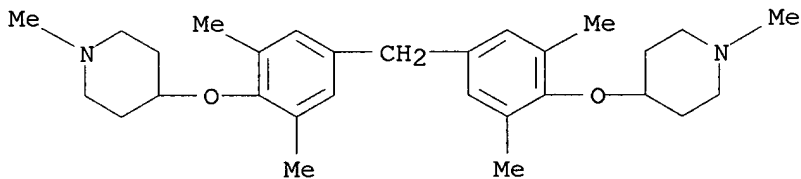
RN 402759-71-1 CAPLUS

CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



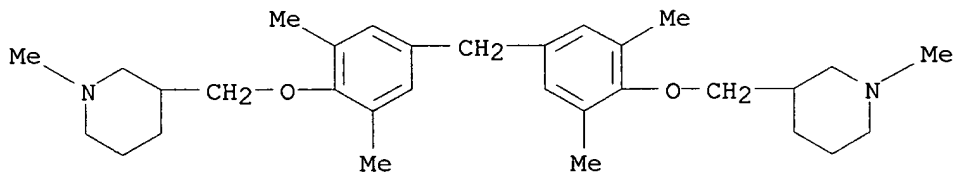
RN 402759-77-7 CAPLUS

CN Piperidine, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



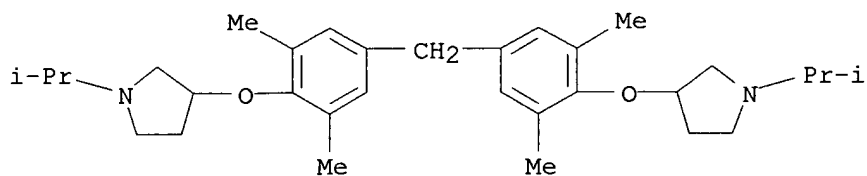
RN 402759-78-8 CAPLUS

CN Piperidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



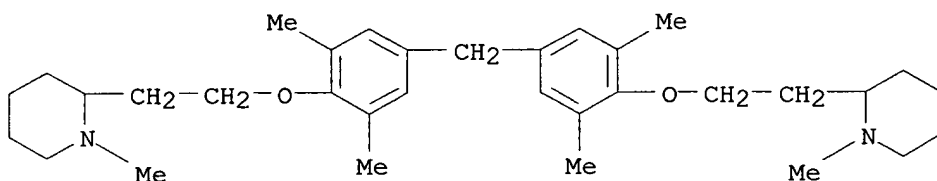
RN 402759-79-9 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-80-2 CAPLUS

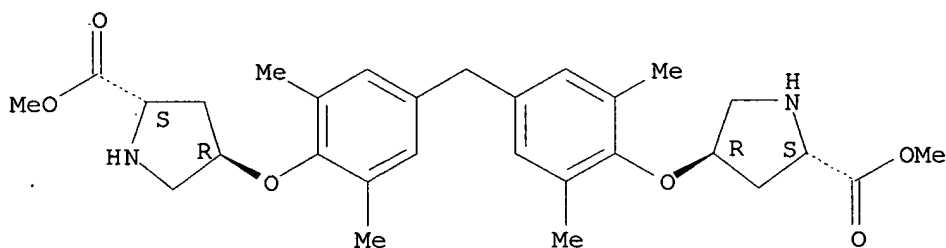
CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-84-6 CAPLUS

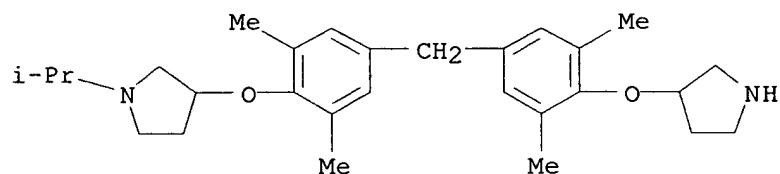
CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, dimethyl ester, (4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



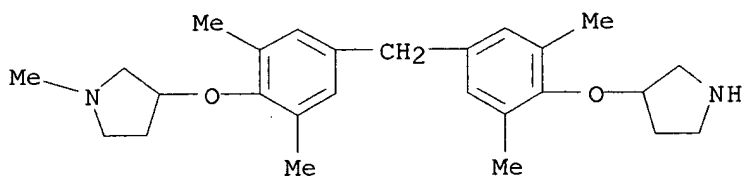
RN 402759-85-7 CAPLUS

CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-86-8 CAPLUS

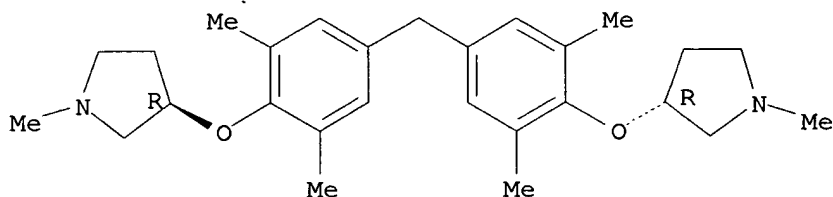
CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-methyl- (9CI) (CA INDEX NAME)



RN 402759-87-9 CAPLUS

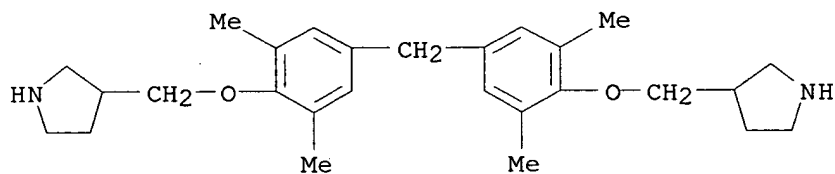
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl-, (3R,3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 402759-88-0 CAPLUS

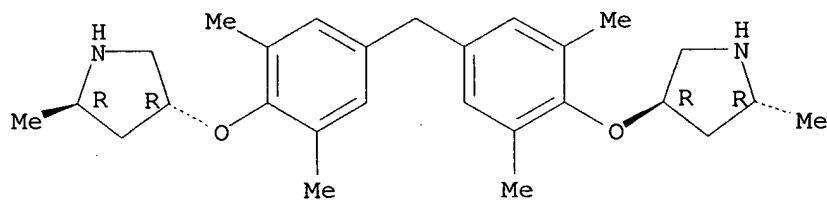
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis-, (3R,3'R,5R,5'R)- (9CI) (CA INDEX NAME)



RN 402759-89-1 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-methyl-, (3R,3'R,5R,5'R)- (9CI) (CA INDEX NAME)

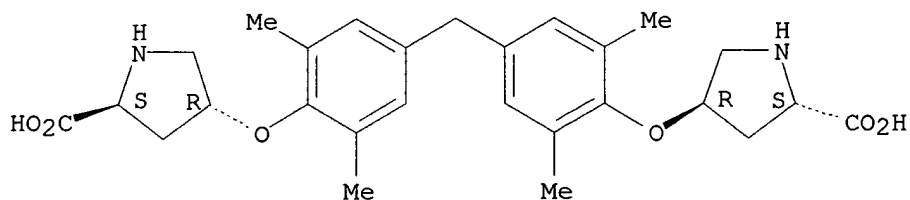
Absolute stereochemistry.



RN 402759-90-4 CAPLUS

CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (4R,4'R)- (9CI) (CA INDEX NAME)

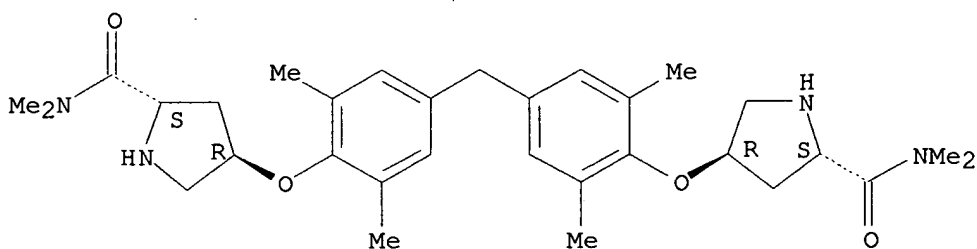
Absolute stereochemistry.



RN 402759-91-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[N,N-dimethyl-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

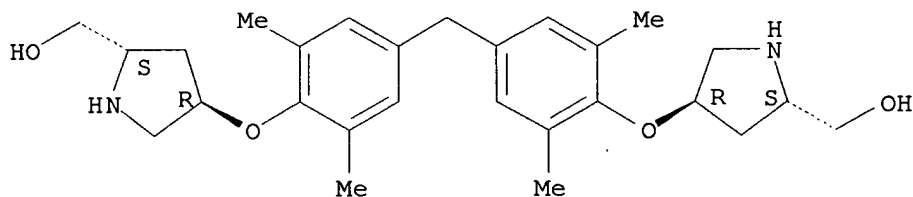
Absolute stereochemistry.



RN 402759-92-6 CAPLUS

CN 2-Pyrrolidinemethanol, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

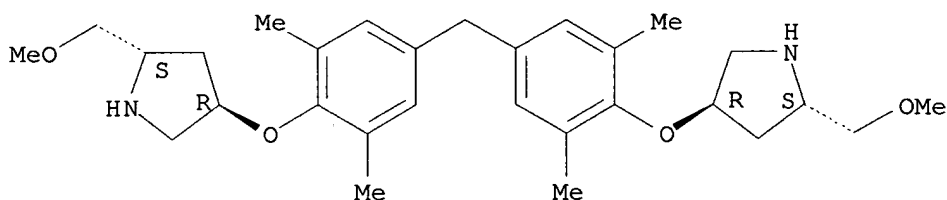
Absolute stereochemistry.



RN 402759-93-7 CAPLUS

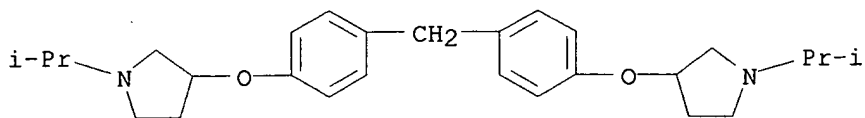
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-(methoxymethyl)-, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



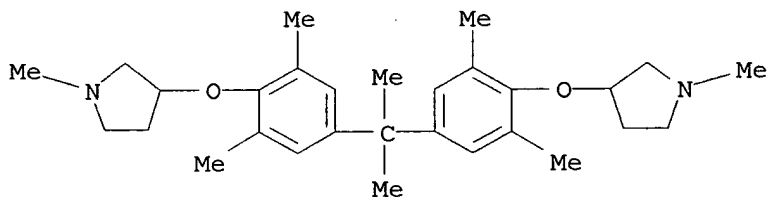
RN 402759-94-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis[1-(1-methylethyl)-
(9CI) (CA INDEX NAME)



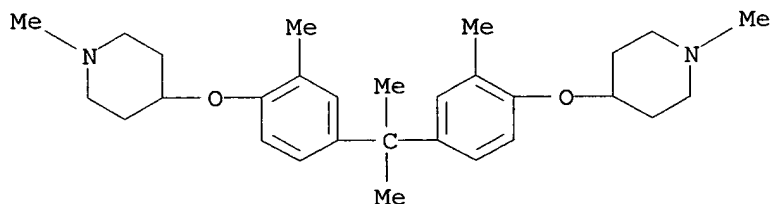
RN 402759-95-9 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



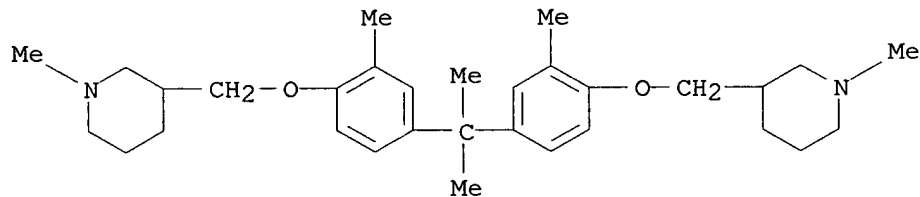
RN 402760-00-3 CAPLUS

CN Piperidine, 4,4'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



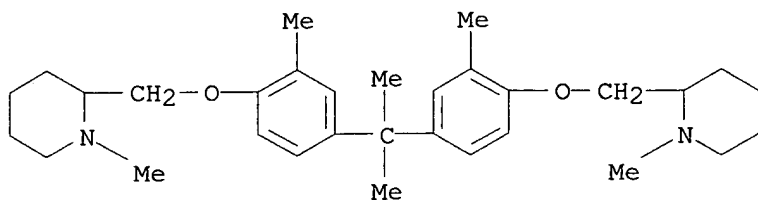
RN 402760-01-4 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



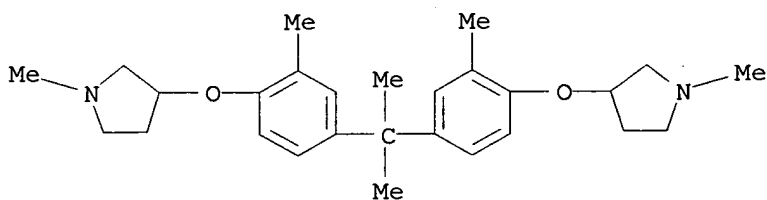
RN 402760-03-6 CAPLUS

CN Piperidine, 2,2'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



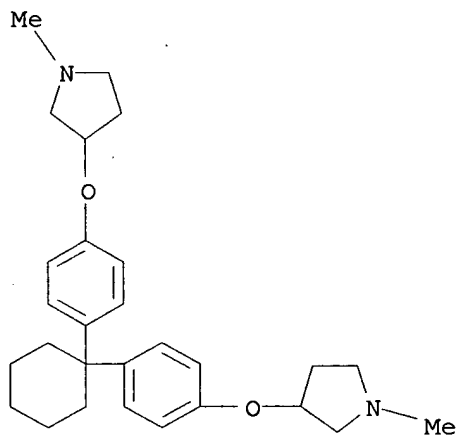
RN 402760-04-7 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



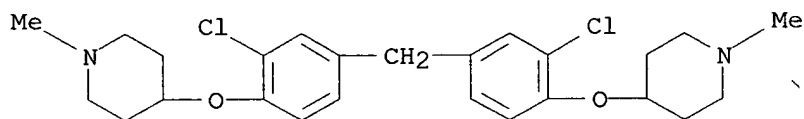
RN 402760-05-8 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



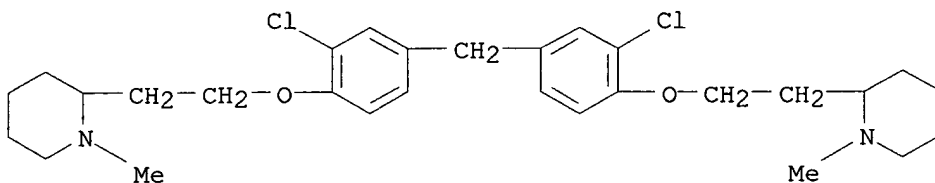
RN 402760-64-9 CAPLUS

CN Piperidine, 4,4'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



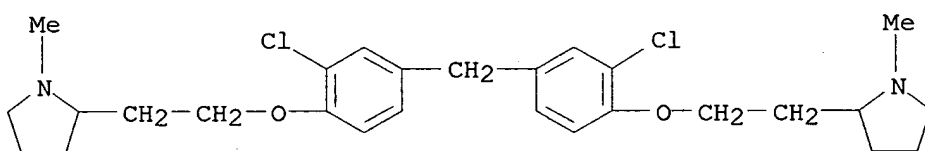
RN 402760-66-1 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



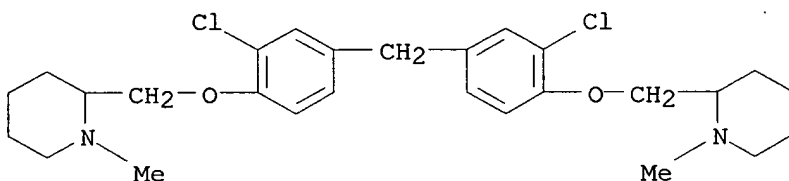
RN 402760-67-2 CAPLUS

CN Pyrrolidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



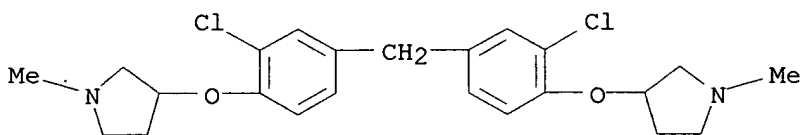
RN 402760-68-3 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



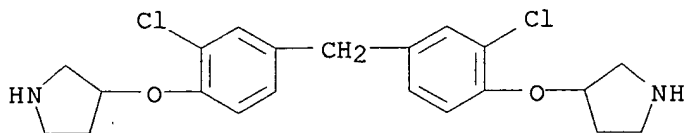
RN 402760-69-4 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



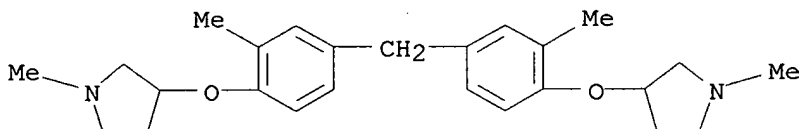
RN 402760-70-7 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



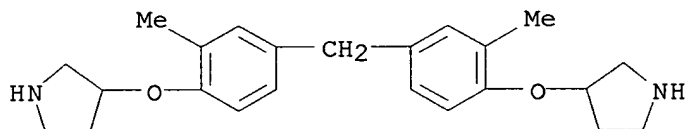
RN 402760-71-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



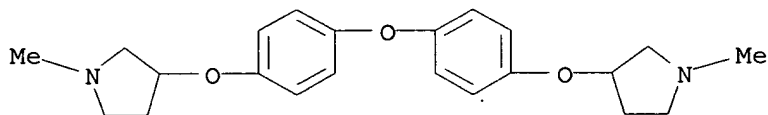
RN 402760-72-9 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



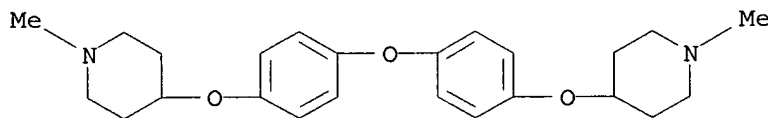
RN 402761-04-0 CAPLUS

CN Pyrrolidine, 3,3'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



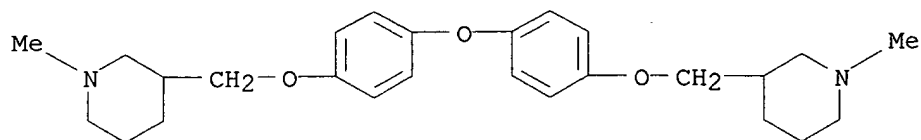
RN 402761-07-3 CAPLUS

CN Piperidine, 4,4'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



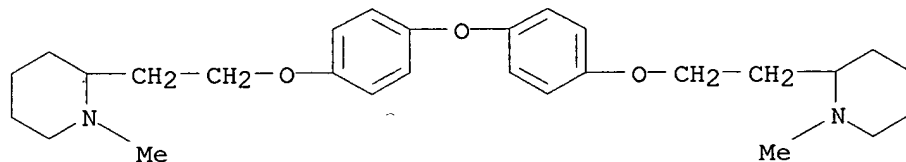
RN 402761-08-4 CAPLUS

CN Piperidine, 3,3'-[oxybis(4,1-phenyleneoxymethylene)]bis[1-methyl- (9CI) (CA INDEX NAME)



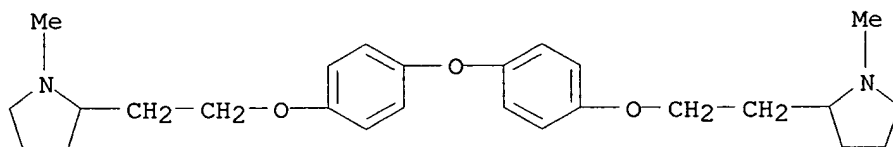
RN 402761-09-5 CAPLUS

CN Piperidine, 2,2'-[oxybis(4,1-phenyleneoxy-2,1-ethanediyl)]bis[1-methyl- (9CI) (CA INDEX NAME)



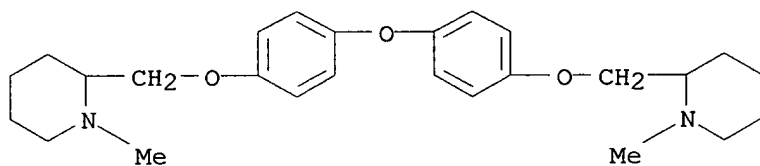
RN 402761-10-8 CAPLUS

CN Pyrrolidine, 2,2'-[oxybis(4,1-phenyleneoxy-2,1-ethanediyl)]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402761-11-9 CAPLUS

CN Piperidine, 2,2'-[oxybis(4,1-phenyleneoxymethylene)]bis[1-methyl- (9CI) (CA INDEX NAME)



IT 402761-15-3P 402761-16-4P 402761-17-5P

402761-18-6P

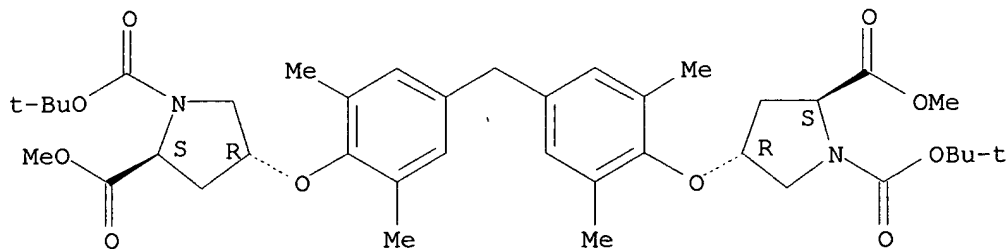
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

RN 402761-15-3 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) 2,2'-dimethyl ester, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

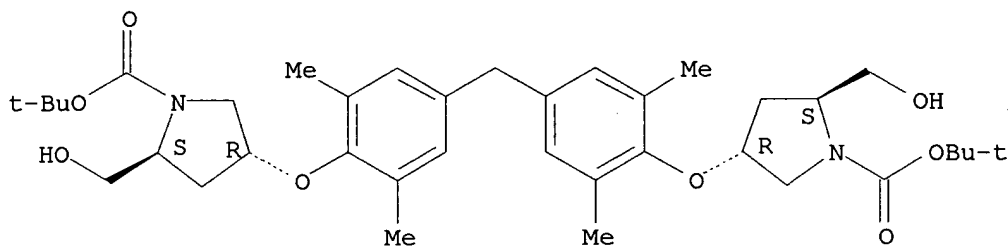
Absolute stereochemistry.



RN 402761-16-4 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-(hydroxymethyl)-, bis(1,1-dimethylethyl) ester, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

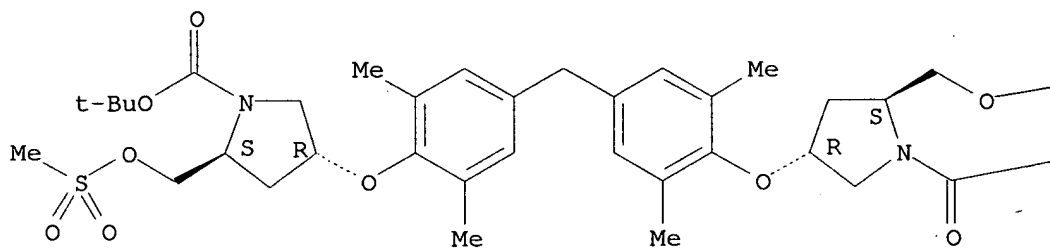


RN 402761-17-5 CAPLUS

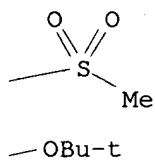
CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-[(methylsulfonyl)oxy]methyl]-, bis(1,1-dimethylethyl) ester, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



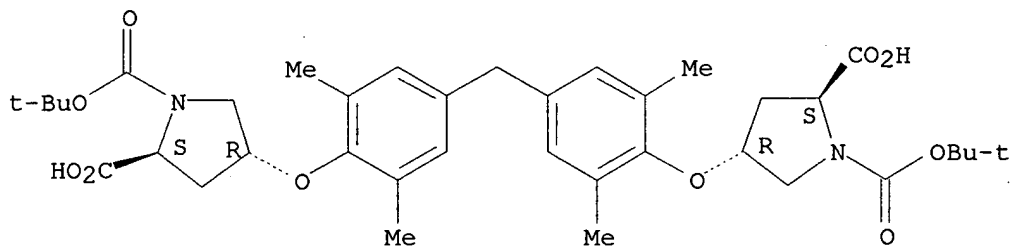
PAGE 1-B



RN 402761-18-6 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) ester, (2S,2'S,4R,4'R)-(9CI) (CA INDEX NAME)

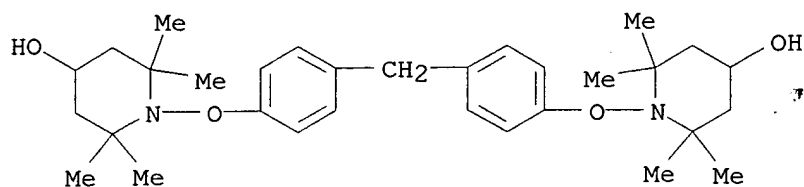
Absolute stereochemistry.



File copy

L77 ANSWER 6 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:816642 CAPLUS
 DN 135:344384
 TI Process for the preparation of sterically hindered aryloxyamines and use
 as stabilization agents for organic substrates
 IN Pastor, Stephen Daniel; Shum, Sai Ping
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 72 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001083455	A1	20011108	WO 2001-EP4620	20010424
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,				
	HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,				
	LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,				
	RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,				
	YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002007585	A1	20020124	US 2001-824149	20010402
	EP 1278733	A1	20030129	EP 2001-936272	20010424
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-200988P	P	20000501		
	WO 2001-EP4620	W	20010424		
OS	CASREACT 135:344384; MARPAT 135:344384				
AB	A process is disclosed for the prepn. of sterically hindered N-substituted aryloxyamines I by the transition-metal-catalyzed decompn. of diazonium salts in the presence of a sterically hindered nitroxyl radical [n = 0 - 1; X = CH ₂ , O, S, N(H or alkyl); R ₆₋₇ = alkyl or together are tetra-/pentamethylene; E = (un)substituted Ph, pyridyl; R = H, alkyl, aryl, OH, carboxy, amino, alkylamino, etc.]. Included are over 20 synthetic examples, evaluation of reaction stoichiometry/catalyst and ability of I to stabilize colored/scented candle wax during fluorescent light exposure. For instance, a suspension of the nitroxyl radical of 4-benzyloxy-2,2,6,6-tetramethylpiperidine (5.79 g, 22.1 mmol), tert-Bu nitrite (2.2 mol equiv.), CuF ₂ (0.01 mol equiv.) in pyridine (120 mL) was heated to 70.degree.C under N ₂ while aniline (1.9 mol equiv.) was charged over 30 min. II was obtained in 55% yield after chromatog. purifn. The disclosed method provides improved yields compared to prior art. The compds. are useful for stabilizing an org. material against damage by light, oxygen and/or heat.				
IT	371756-19-3P				
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)				
	(process for prepn. of sterically hindered aryloxyamines and use as stabilization agents for org. substrates)				
RN	371756-19-3 CAPLUS				
CN	4-Piperidinol, 1,1'-[methylenebis(4,1-phenyleneoxy)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)				



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 7 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 2001:781696 CAPLUS

DN 136:86192

TI Reduction of the 2-azetidinone moiety in the polymer main chain: a novel synthetic route to polyamine with hydroxymethyl pendant

AU Sudo, Atsushi; Sato, Masato; Endo, Takeshi

CS Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan

SO Journal of Polymer Science, Part A: Polymer Chemistry (2001), 39(21), 3789-3796

CODEN: JPACEC; ISSN: 0887-624X

PB John Wiley & Sons, Inc.

DT Journal

LA English

AB A polymer with a 2-azetidinone moiety in its main chain was efficiently synthesized by [2 + 2] cycloaddn. of bisimine with bisketene. The bisketene was easily prep'd. by dehydrochlorination of the corresponding dicarboxylic acid chloride and was used without purifn. The treatment of the obtained polymer with lithium aluminum hydride resulted in a reductive ring-opening reaction of the 2-azetidinone moiety in the main chain that gave the corresponding linear polyamine with hydroxymethyl side chains.

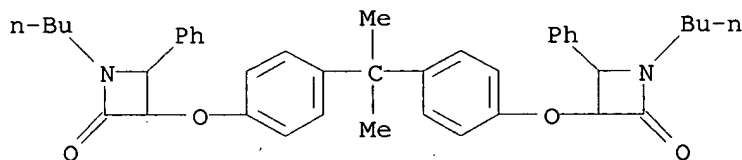
IT 386285-03-6

RL: SPN (Synthetic preparation); PREP (Preparation)

(model reaction product; redn. of the 2-azetidinone moiety in the polymer main chain as a synthetic route to polyamines with hydroxymethyl pendant)

RN 386285-03-6 CAPLUS

CN 2-Azetidinone, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-butyl-4-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

Same as #11

L77 ANSWER 8 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 2000:106803 CAPLUS

DN 132:158946

TI Direct imaging-type lithographic original plate and manufacture of lithographic printing plate

IN Goto, Kazuki; Tabata, Kenichi; Ikeda, Norimasa

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000043437	A2	20000215	JP 1999-141448	19990521
PRAI	JP 1998-147482		19980528		

AB The title lithog. original plate comprises a substrate coated with a heat-sensitive layer having a thickness of .ltoreq.5 .mu.m and contg. a light-heat-converting substance and a thermosetting compd. and then with a film-forming polymer layer having a thickness of .gtoreq.1 .mu.m and an O permeability of .ltoreq.30 cm³-cm-m-2-24 h-1-atm-1. A lithog. original plate, comprising a substrate laminated successively with a hydrophilic swelling layer having a thickness of .ltoreq.5 .mu.m, a water absorption of 1-50 g/m², and a water swelling rate of 10-2000%, the heat-sensitive layer, and the film-forming polymer layer, is imagewise exposed to a laser beam to cure the exposed areas of the heat-sensitive layer and the polymer layer is then peeled off to remove the unexposed areas of the heat-sensitive layer together with the layer to expose the non-image areas of the hydrophilic swelling layer for forming ink-repellent non-image areas. The lithog. original plate can be treated easily in platemaking and the resulting printing plate shows improved image reproducibility and printing durability.

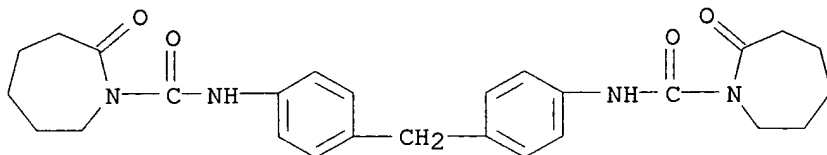
IT 54112-23-1, DM 30

RL: DEV (Device component use); USES (Uses)

(heat-sensitive layer; lithog. plate having heat-sensitive layer contg. light-heat-converting material and thermosetting compd. and oxygen permeability-controlled layer)

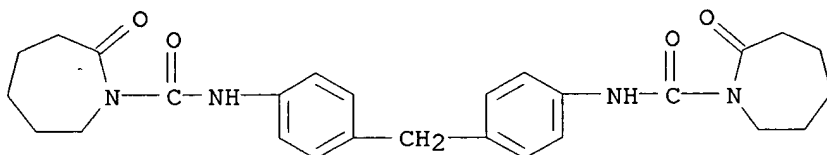
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as #9.

L77 ANSWER 9 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1999:292145 CAPLUS
 DN 131:131093
 TI Effect of the blocked isocyanate on the physical and chemical characteristics of rubber mixtures and vulcanizates
 AU Puchkov, A. F.
 CS Volzhskii Politekh. Inst., Volgogr. Gos. Tekh. Univ., Volzhski, Russia
 SO Kauchuk i Rezina (1998), (5), 23-25
 CODEN: KCRZAE; ISSN: 0022-9466
 PB Kauchuk i Rezina
 DT Journal
 LA Russian
 AB .epsilon.-Caprolactam-blocked polyisocyanate K (a mixt. of MDI and its dimers) was used as a modifying agent for sulfur-vulcanized isoprene rubbers. Vulcanization was carried out in the presence of hexachloro-p-xylene and a sulfenamide accelerator. .epsilon.-Caprolactam-blocked polyisocyanate-modified rubber compns. show a prolonged induction period and decreased vulcanization rate. Elastic deformation characteristics of vulcanizates are also affected by the modification. .epsilon.-Caprolactam-blocked polyisocyanate improves rubber-cord adhesion.
 IT **54112-23-1**
 RL: MOA (Modifier or additive use); USES (Uses)
 (effect of the caprolactam-blocked MDI polyisocyanate on rubber compns. and vulcanizates)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as #10

L77 ANSWER 10 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1998:672630 CAPLUS

DN 129:278321

TI Fluids for use in drilling and completion operations comprising water insoluble colloidal complexes for improved rheology and filtration control

IN Norfleet, James E.; Jarrett, Michael A.; Dye, William M.; Clapper, Dennis K.; Robinson, Geoffrey; Bland, Ronald G.; Weirich, John B.; Chesser, Billy G.

PA Baker Hughes Incorporated, USA

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9842795	A1	19981001	WO 1998-US4591	19980309
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5919738	A	19990706	US 1997-823851	19970325
	AU 9864549	A1	19981020	AU 1998-64549	19980309
	GB 2339445	A1	20000126	GB 1999-22607	19980309
	GB 2339445	B2	20011114		
PRAI	US 1997-823851	A	19970325		
	WO 1998-US4591	W	19980309		

AB The present invention provides a method of prepg. a fluid for use in drilling and completion operations comprising mixing a fluid comprising a salt of an alk. earth metal with a nonionic colloid-forming material in an amt. and under conditions sufficient to convert a majority of said nonionic colloid-forming material into water insol. hydrated colloidal complexes comprising hydrated ions of said alk. earth metal complexed with said nonionic colloid-forming material, said complexes being effective to improve a property of said fluid selected from the group consisting of rheol., fluid loss control, and a combination thereof.

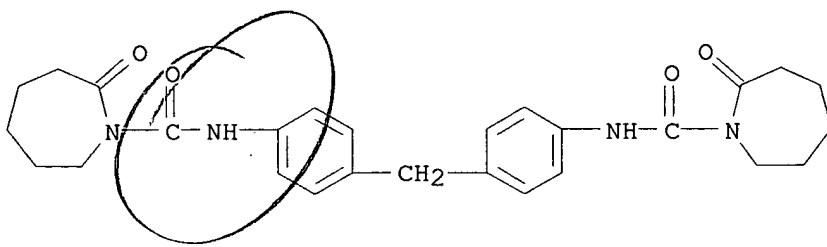
IT 54112-23-1, DM-30

RL: MOA (Modifier or additive use); USES (Uses)

(fluids for use in drilling and completion operations comprising water insol. colloidal complexes for improved rheol. and filtration control)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

L77 ANSWER 11 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1998:658915 CAPLUS

DN 130:4152

TI A Novel Reactive Polymer Having 2-Azetidinone-structure on the Main Chain:
Development of Its Convenient Synthetic Method Based on [2 +
2]Cycloaddition of Bisketene with Bisimine

AU Sudo, Atsushi; Endo, Takeshi

CS Research Laboratory of Resources Utilization, Tokyo Institute of
Technology, Yokohama, 226-8503, Japan

SO Macromolecules (1998), 31(22), 7996-7998

CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB A bisketene, which was generated directly from a bisphenol A derived
carboxylic acid by treatment with 2-chloropyridinium iodide and
triethylamine, reacted with a bisimide smoothly in a [2+2] cycloaddn. to
give the corresponding poly(2-azetidinone) efficiently.

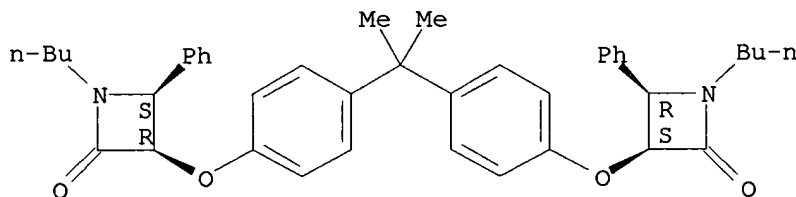
IT **215817-00-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(model compd. for poly(azetidinone))

RN 215817-00-8 CAPLUS

CN 2-Azetidinone, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-butyl-
4-phenyl-, (3R,3'S,4S,4'R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 12 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1997:505351 CAPLUS

DN 127:136852

TI Membrane materials having good resistance to soiling and fire and their manufacture

IN Takeda, Masanobu; Hayakawa, Toshihiro; Seki, Masao

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09183188	A2	19970715	JP 1995-344131	19951228
PRAI	JP 1995-344131		19951228		

AB Title materials are manufd. by (1) addn. of mixt. solns. of cationic polyurethanes and blocked polyisocyanates and/or water repellents on surfaces of fabrics, (2) heat treatment at .gtoreq.120.degree., and (3) coating or hot-pressing thermoplastic resins on one or both sides of fabrics. Thus, a polyester fabric was dipped in a mixt. of 100 parts a cationic polyurethane (prepd. from ethylene glycol, 1,4-butanediol, adipic acid, 2,4-TDI, 2,6-TDI, diethylenetriamine, epichlorohydrin, and glycolic acid aq. solns.) and 5 parts a blocked isocyanate aq. dispersion, squeezed, dried at 130.degree., heated at 190.degree. for 1 min, and hot-pressed with a coating contg. Evatate CV 2097 (EVA) at 180.degree. to give a test piece showing adhesion strength 6.1 kg/3 cm (to the fabric; JIS K 6328), good water absorption and fire resistance.

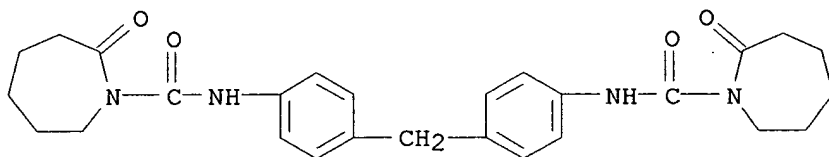
IT 54112-23-1DP, reaction products with polyurea-polyurethane-polyamines

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(fireproof membrane materials manufd. from cationic polyurethanes, blocked isocyanates, and water repellents)

RN 54112-23-1 CAPLUS

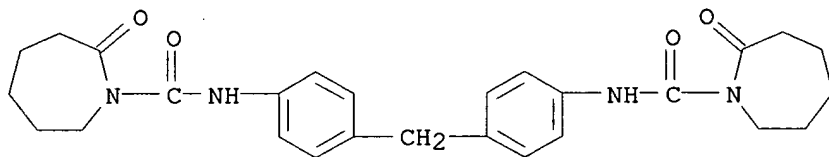
CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



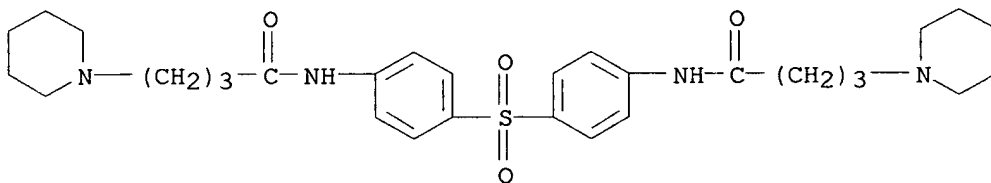
Same as #10

L77 ANSWER 13 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:270382 CAPLUS
 DN 127:5421
 TI Polymerization of lactams. Part 88. Copolymers poly(.epsilon.-caprolactam)-
 block-polybutadiene prepared by anionic polymerization. Part 3. Model
 polymerizations initiated with potassium salt of .epsilon.-caprolactam and
 accelerated with isocyanates and their derivatives
 AU Sobotik, Roman; Srubar, Radim; Roda, Jan
 CS Institute Chemical Technology, Faculty Chemical Technology, Prague, 16628,
 Czech Rep.
 SO Macromolecular Chemistry and Physics (1997), 198(4), 1147-1163
 CODEN: MCHPES; ISSN: 1022-1352
 PB Huethig & Wepf
 DT Journal
 LA English
 AB Anionic polymn. of .epsilon.-caprolactam was initiated with the K salt of
 .epsilon.-caprolactam and accelerated with Ph isocyanate, tolylene
 diisocyanate, 4,4'-diphenylmethane diisocyanate, some derivs. of these
 isocyanates (urethanes, ureas, and allophanates), or combinations of Ph
 isocyanate with its derivs. at 150.degree.. The effect of individual
 structures on the polymn. kinetics and their contribution to the prepn. of
 block copolymers of .epsilon.-caprolactam with hydroxy-terminated
 prepolymers, in-situ functionalized with diisocyanates, are discussed on
 the basis of a detailed anal. of time functions of polymer yield and d.p.
 IT **54112-23-1**
 RL: CAT (Catalyst use); USES (Uses)
 (isocyanate accelerator effects on anionic polymn. of potassium
 caprolactam and on prepn. of block copolymers with hydroxy-terminated
 prepolymers)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-
 oxo- (9CI) (CA INDEX NAME)

same as
#10



L77 ANSWER 14 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:98555 CAPLUS
 DN 126:220325
 TI Diarylsulfones, a novel class of human immunodeficiency virus type 1 integrase inhibitors
 AU Neamati, Nouri; Mazumder, Abhijit; Zhao, He; Sunder, Sanjay; Burke, Terrence, R., Jr.; Schultz, Robert J.; Pommier, Yves
 CS Lab. Molecular Pharmacol. Medicinal Chem., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Antimicrobial Agents and Chemotherapy (1997), 41(2), 385-393
 CODEN: AMACCO; ISSN: 0066-4804
 PB American Society for Microbiology
 DT Journal
 LA English
 AB A majority of reported human immunodeficiency virus type 1 integrase (HIV-1 IN) inhibitors are polyhydroxylated arom. compds. contg. two Ph rings sepd. by aliph. or arom. linkers. Most inhibitors possessing a catechol moiety exhibit considerable toxicity in cellular assays. In an effort to identify nonhydroxylated analogs, a series of arom. sulfones were tested for their ability to inhibit the 3' processing and strand transfer steps that are necessary for HIV replication. Several arom. sulfones have previously been shown to have moderate activity against HIV-1 reverse transcriptase in cellular assays; however, their inhibitory potencies against IN have not been explored. In the present study, the inhibitory effect of a series of sulfones and sulfonamides against IN was detd. Among 52 diaryl sulfones tested, 4 were detd. to be highly potent (50% inhibitory concn. [IC50], 0.8 to 10 .mu.g/mL), 5 had good potencies (IC50, 11 to 50 .mu.g/mL), 10 showed moderate potencies (IC50, 51 to 100 .mu.g/mL), and 33 were inactive (IC50, > 100 .mu.g/mL) against IN. All of the active compds. exhibited similar potencies against HIV-2 IN. Sulfa drugs, used extensively in treating Pneumocystis carinii pneumonia, a leading cause of morbidity and mortality in AIDS patients, were also examd. Among 19 sulfonamides tested, sulfasalazine (IC50, 50 .mu.g/mL) was the most potent. The authors conclude that potent inhibitors of IN can be designed based on the results presented in this study.
 IT **187928-63-8**, NSC 95632
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (diarylsulfones as novel class of human immunodeficiency virus type 1 integrase inhibitors)
 RN 187928-63-8 CAPLUS
 CN 1-Piperidinebutanamide, N,N'-(sulfonyldi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 15 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1996:589702 CAPLUS

DN 125:224296

TI Resin-modified fibers for reinforcement of rubber with improved flexibility and adhesion to rubbers and reinforced products

IN Hanioka, Kyohiro; Sato, Yasuhiro; Okada, Masamichi

PA Toray Industries, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08158261	A2	19960618	JP 1994-306391	19941209
PRAI	JP 1994-306391		19941209		
OS	MARPAT 125:224296				

AB Title fibers are modified by addn. of a 1st treatment compn. contg. polyepoxides and/or blocked polyisocyanates (A) and addn. of 2nd treatment compns. contg. resorcin-HCHO copolymer (I)/rubber latex (RFL), A, and polysaccharides and/or their derivs. The fiber-reinforced rubber are useful in products such as tires, conveyer belts, hoses, etc. Thus, a PET cord was impregnated with an aq. compn. contg. pentaerythritol diglycidyl ether and Neocol SW 30 (dioctyl sodiosulfosuccinate), heated at 120-235.degree. for 4 min, impregnated with compn. contg. Na alginate, DM 30, and an aq. latex comprising I and CSM 450, and heated at 120-160.degree. for 4 min then the resulted modified cord was used for reinforcing a tire carcass (natural rubber and SBR) to show good adhesion to rubber and improved bending rigidity.

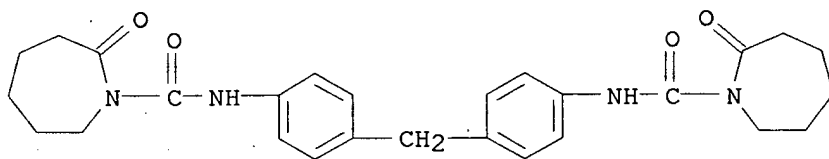
IT 54112-23-1, Dm 30

RL: MOA (Modifier or additive use); USES (Uses)

(modifiers; fibers modified by resins for reinforcing rubbers with improved flexibility and adhesion)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



50

L77 ANSWER 16 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1996:574754 CAPLUS

DN 125:249397

TI Blocked diisocyanate-modified epoxy resin: mechanism and mechanical properties

AU Ma, Chen-Chi M.; Li, Ming-Shiu; Wu, Yio-Doh; Su, Yi-Feng

CS Inst. Chem. Eng., Natl. Tsing Hua Univ., Hsin-Chu, 30043, Taiwan

SO Journal of Applied Polymer Science (1996), 62(3), 523-531

CODEN: JAPNAB; ISSN: 0021-8995

PB Wiley

DT Journal

LA English

AB The modification of bisphenol A-based epoxy resin with isocyanates was investigated. To increase the crosslinking d. by a urethane reaction and to conduct the normal crosslinking reaction between the epoxide and the amine during the cure cycle, blocking the isocyanates with active hydrogens is necessary, which may be deblocked and reacted at elevated temp. The modified reactions involving diisocyanates and hydroxyl groups generated from epoxy cured with an amine system were studied. This mechanism can be identified by the variations of IR spectra in the carbonyl group stretching region. Furthermore, the effect of the blocked isocyanate incorporation with amine on the reactivity of epoxy was also studied. The thermal and the mech. properties were characterized. It was found that the glass transition temp. increased with an arom. blocked-diisocyanate content. The mech. properties were improved by blocked diisocyanate. The morphol. was also investigated, which showed that a homogeneous structure existed in the modified system.

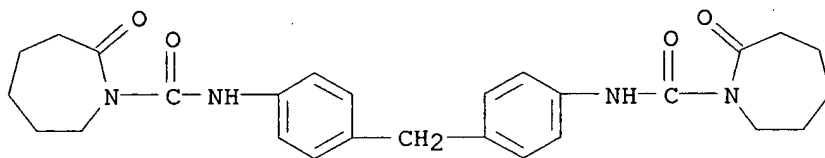
IT 54112-23-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(curing of epoxy resins with diamines in presence of subsequently reacting blocked diisocyanates)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as
#10

L77 ANSWER 17 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1996:379539 CAPLUS

DN 125:87405

TI Polymerization of lactams. Part 87. Block copolymers of poly(.epsilon.-caprolactam) and polybutadiene prepared by anionic polymerization. Part 1. Preparation and properties

AU Novakova, Vaclava; Sobotik, Roman; Matenova, Jana; Roda, Jan

CS Department Polymers, Institute Chemical Technology, Prague, 16628, Slovakia

SO Angewandte Makromolekulare Chemie (1996), 237, 123-141

CODEN: ANMCBO; ISSN: 0003-3146

PB Huethig & Wepf

DT Journal

LA English

AB The effect of the polymn. conditions on the properties of poly(.epsilon.-caprolactam)-polybutadiene block copolymers prepd. by polymn. casting through anionic polymn. of .epsilon.-caprolactam (I) initiated with potassium salt of I in the presence of .alpha.,.omega.-dihydroxy-polybutadiene and isocyanates or their blocked derivs. as functionalizing agents was investigated. The influence of the content of telechelic polybutadiene, its mol. wt., type of diisocyanate, and polymn. temp. on the fundamental mech. properties of the prepd. materials and on the polymn. rate was evaluated.

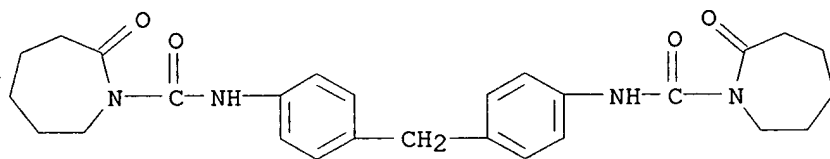
IT **54112-23-1**

RL: NUU (Other use, unclassified); USES (Uses)

(activator; effect of activators on prepn. and properties of butadiene-.epsilon.-caprolactam block copolymer)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as #10

L77 ANSWER 18 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1996:231478 CAPLUS

DN 124:262814

TI Casting of aromatic polyamide films from spinning solutions

IN Akiyoshi, Kazunori; Iwasaki, Katsuhiko; Niwano, Masahiro; Ohbe, Yoshitaka

PA Sumitomo Chemical Co., Ltd., Japan

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19528411	A1	19960215	DE 1995-19528411	19950802
	JP 08100073	A2	19960416	JP 1995-133246	19950531
	US 5659007	A	19970819	US 1995-506950	19950726
	GB 2292110	A1	19960214	GB 1995-15853	19950802
	GB 2292110	B2	19980225		
PRAI	JP 1994-182317		19940803		

Same as # 10

AB In the title process, which can be used to prep. transparent, strong films directly from spinning solns. without the use of H₂SO₄, optically isotropic spinning solns. of arom. polyamides in polar amides are cast in thin films, dipped in polar solvents other than amides to coagulate the soln. while maintaining optical anisotropy, and the resulting films are dried in the presence of isocyanates. A 6% soln. of poly(p-phenyleneterephthalamide) (inherent viscosity 1.72 dL/g) in N-methylpyrrolidone (I) was mixed with a soln. of caprolactam-MDI adduct (2:1) (II) in I to give a 3% polyamide soln. contg. 0.6% II which was cast on glass to give a 0.6-mm film which was dipped in MeOH at -70.degree. for 30 min. The resulting film, when rinsed in MeOH at -70.degree. and dried at 100-200.degree. for 4 h, had tensile strength 22.9 kg/mm² and tensile modulus 1340 kg/mm².

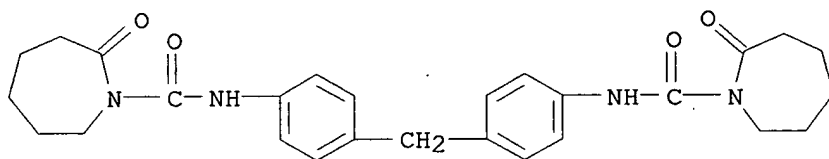
IT 54112-23-1

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(casting of arom. polyamide films from spinning solns. in presence of)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 19 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1996:153893 CAPLUS

DN 124:204576

TI Polymer molding materials with good adhesion to fibers and rubbers

IN Nedachi, Satoshi

PA Ashimori Ind Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07331222	A2	19951219	JP 1994-156817	19940614
PRAI	JP 1994-156817		19940614		

AB The title materials are obtained by solidifying 60-95% blocked polyisocyanates and binders to give master batch pellets and mixing polymer materials with the pellets with blocked polyisocyanate content 0.5-5 parts per 100 parts polymer materials. Thus, 75% DM 30X and polyglycerin fatty acid ester were mixed and solidified to give master batch pellets, which were mixed with Mobilon P 30 (polyurethane elastomer) and hot-pressed with a polyester fiber sheet to give a test piece showing adhesion strength 6.0 kg/25-mm.

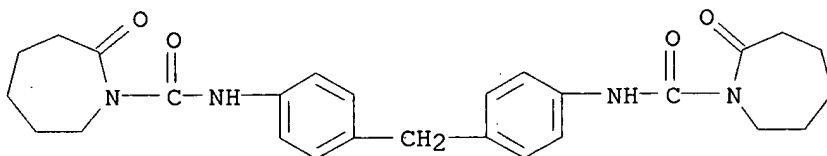
IT 54112-23-1, DM 30X

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(polymer molding materials contg. blocked polyisocyanates with good adhesion to fibers and rubbers)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as
10

L77 ANSWER 20 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:698934 CAPLUS
 DN 123:85330
 TI Strongly adhering thermoplastic resin and fiber material
 IN Nedachi, Satoshi; Pponma, Takeshi
 PA Ashimori Ind Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

same as #10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07126406	A2	19950516	JP 1993-297214	19931102
	JP 2724670	B2	19980309		
PRAI	JP 1993-297214		19931102		

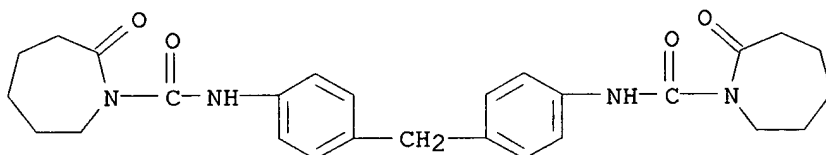
AB Thermoplastic resin and fiber material are adhered by hot-pressing a fiber material, which is coated with treatment agent contg. a blocked polyisocyanate compd. or poly epoxide compd. and thermally treated, and a thermoplastic resin compn. contg. 0.5-5 parts of blocked polyisocyanate compd. per 100 parts of the thermoplastic resin.

IT **54112-23-1**, DM 30X

RL: TEM (Technical or engineered material use); USES (Uses)
 (incorporated in thermoplastic resin or coated on fiber material for strongly adhering)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 21 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1995:563230 CAPLUS

DN 122:291731

TI Polymerizable aspartimides

IN Furuya, Hiroyuki

PA Kanegafuchi Chemical Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06298864	A2	19941025	JP 1993-112256	19930414
PRAI	JP 1993-112256		19930414		

AB Aspartimides having structure I or II (Ar = bivalent org. group; X = unsatd. bond-contg. group) are manufd. The aspartimides can be cured upon heating to provide polyimides with good heat resistance, soly. in org. solvents, and processibility. One such aspartimide was synthesized by reacting diaminodiphenylmethane with a maleimide obtained from the reaction of maleic anhydride and 3-(4-aminophenoxy)-1-propyne and was pressed at 150-180.degree. to give a 3.4-mm polymer plate with d. 1.39 g/cm³ and Tg 203.degree..

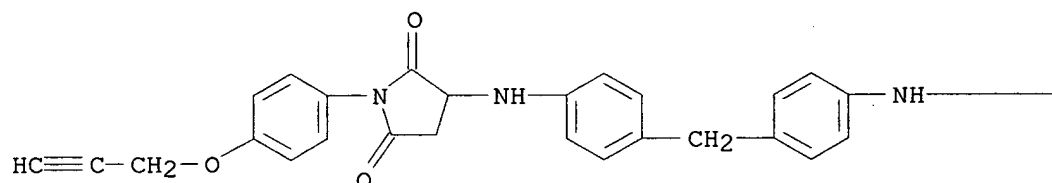
IT **163215-26-7P**

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(polymerizable aspartimides)

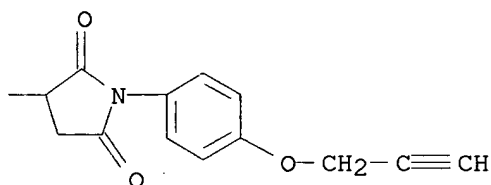
RN 163215-26-7 CAPLUS

CN 2,5-Pyrrolidinedione, 4,4'-[methylenebis(4,1-phenyleneimino)]bis[1-[4-(2-propynyloxy)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 22 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:441362 CAPLUS
 DN 122:226782
 TI Thermally fixing toners with improved fixability
 IN Myamoto, Hidetoshi; Takama, Masaaki; Nagai, Hiroki; Machida, Junji
 PA Minolta Camera Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

Same as #10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06332242	A2	19941202	JP 1993-118222	19930520
	JP 3136833	B2	20010219		
PRAI	JP 1993-118222		19930520		

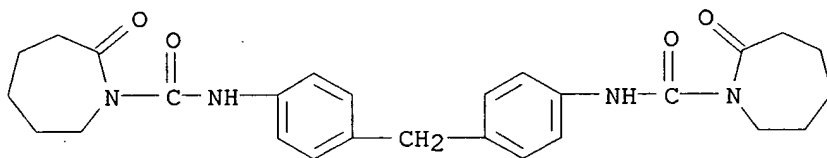
AB The title toners contain a resin, a colorant, a polyvalent isocyanate deriv. whose isocyanate groups are protected with a blocking agent, and a hardening agent comprising an active H-donating compd. The toners show good fixability and antioffset properties and provide high resolu. images with good resistance to poly(vinyl chloride) sheets. Thus, a compn. contg. low mol. wt. polyester, Mogal L (carbon black), a charge-controlling agent, .epsilon.-caprolactam-protected dipheylmethane-4,4'-diisocyanate, and hexamethylenediamine was suspension-polymd. in an aq. medium and spray-dried to give a toner, which was mixed with a carrier to give a developer.

IT **54112-23-1P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (electrophotog. developer toner contg. blocked isocyanate and hardening agent)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 23 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1995:275363 CAPLUS

DN 122:174488

TI Thermal recording materials containing caprolactam derivative

IN Nakamura, Mikio; Tomikanehara, Masahiro

PA Shinoji Seishi Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06262852	A2	19940920	JP 1993-50319	19930311
PRAI	JP 1993-50319		19930311		

AB The title recording materials are manufd. by forming on a support a recording layer contg. a colorless basic dye, a color developer, and caprolactam deriv. I. I prevents background fog formation under high temp. and high moisture conditions and provide images with good storage stability. Thus, a paper support with an undercoat layer was coated with a compn. contg. 3-n-butylamino-6-methyl-7-phenylaminofluoran, 4,4'-isopropylidenediphenol, and TO-30 (dispersion of I) to give a thermal recording paper.

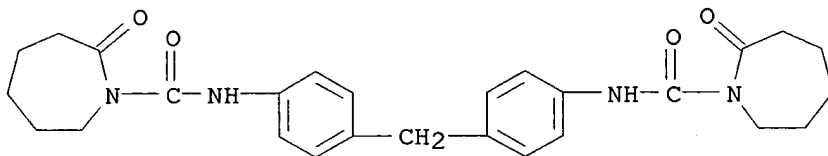
IT **54112-23-1**

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(TO 30; thermal printing materials contg. caprolactam deriv. for prevention of background fog formation)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



*Same as
#10*

L77 ANSWER 24 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1995:248423 CAPLUS

DN 122:135855

TI Adhesive polymer compositions and the adhesion to fabrics and other materials

IN Nedachi, Satoshi

PA Ashimori Ind. Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06179860	A2	19940628	JP 1992-353978	19921214
PRAI	JP 1992-353978		19921214		

AB Adhesive polymer compns. consist of 100 parts of polymeric materials and 0.5-5 phr blocked diisocyanates and adhere to fiber materials upon heating. A master batch contained 80 wt.% polyurethane rubber and 20 wt.% caprolactam-blocked 4,4'-diisocyanatodiphenylmethane. The master batch material was mixed with a nylon rubber to obtain an adhesive compn. contg. 2 wt.% of the blocked diisocyanate. The compn. then was laminated with a polyester fiber cloth by pressing at 185.degree. under 18.6 kg/cm² for 5 min.

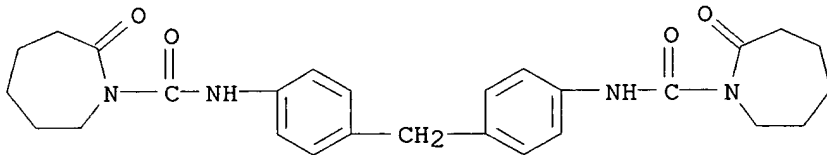
IT 54112-23-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(adhesive polymer compns. and the adhesion to fabrics and other materials)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



*Same as
10*

L77 ANSWER 25 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1993:671792 CAPLUS

DN 119:271792

TI Synthesis, mechanism and kinetics of radical polymerization of bismaleimide-type telechelic oligomers in solvent and in the solid state

AU Grenier-Loustalot, Marie Florence; Gouarderes, Frederic; Joubert, Frederic; Grenier, Philippe

CS Lab. Chim. Org. Phys., Pau, 64000, Fr.

SO Polymer (1993), 34(18), 3848-59

CODEN: POLMAG; ISSN: 0032-3861

DT Journal

LA English

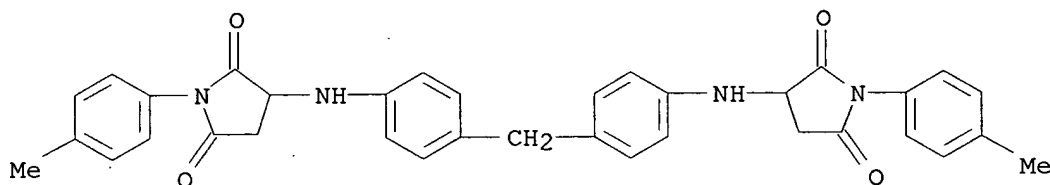
AB In order to characterize the various residual fragments or those created during the use and polymn. of bismaleimide prepolymers, different compds. characteristic of the expected fragments were synthesized and physicochem. characterized by FTIR and NMR spectroscopy and DSC. Thus, depending on heating temp., the bismaleimide telechelic group gives rise to chain extension at 140-150.degree. in the presence of arom. diamines, either by addn. or by maleimide ring opening. At higher temps. (200.degree.) it causes a crosslinking reaction, which forms a three-dimensional system.

IT 151519-05-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as model compd. for bismaleimide polyimides)

RN 151519-05-0 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-(4-methylphenyl)- (9CI) (CA INDEX NAME)



L77 ANSWER 26 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1993:496510 CAPLUS
 DN 119:96510
 TI Manufacture of 2-pyrrolidone polymers
 IN Nishama, Masao; Miwa, Yoshuki; Gogota, Tadao
 PA Ube Industries, Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05059167	A2	19930309	JP 1991-298591	19910830
	JP 2914537	B2	19990705		
PRAI	JP 1991-298591		19910830		

OS MARPAT 119:96510

AB In polymn. of 2-pyrrolidone (I) in the presence of basic polymn. catalysts (BC) and gaseous CO₂ or SO₂ as polymn. initiators, 0.0001-00.1 mol/mol-BC carbamide compds. II or III (n = 3-11; M1 = monovalent hydrocarbyl; M2 = bivalent hydrocarbyl) are used. Thus, treating 220 g I with 15.5 g KOH (purity 85%) and removing 24.3 g I and the byproduct H₂O gave a mixt. contg. I and 0.1 mol/mol-I K pyrrolidone (IV), which was blended with 0.002 mol/mol-IV 1,6-hexamethylenebis(carbamidocaprolactam) and 0.32 mol/mol-IV CO₂ and heated at 50.degree. for 24 h to give a polymer showing relative viscosity 12.2.

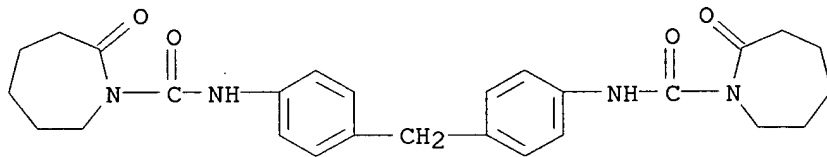
IT 54112-23-1

RL: USES (Uses)

(pyrrolidone polymn. in presence of)

RN 54112-23-1 CAPLUS

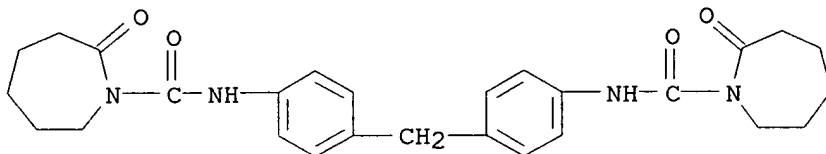
CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as
#10

L77 ANSWER 27 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1993:22710 CAPLUS
 DN 118:22710
 TI Preparation of polymeric initiators of the anionic polymerization of lactams from polyetherdiols
 AU Stehlicek, J.; Chauhan, Ghanshyam S.; Znasikova, M.
 CS Inst. Macromol. Chem., Czech. Acad. Sci., Prague, 162 06, Czech.
 SO Journal of Applied Polymer Science (1992), 46(12), 2169-75
 CODEN: JAPNAB; ISSN: 0021-8995
 DT Journal
 LA English
 AB The kinetics of alcoholysis of bis(N-acyl-6-hexanelactams) and bis(N-carbamoyl-6-hexanelactams) was studied for the purpose of the prepn. of bifunctional polymeric initiators of the anionic polymn. of 6-hexanelactam used in the prodn. of polyamide block copolymers by reactive processing. The reaction was carried out with 1-octanol as a model alc. and with polypropylene glycol, without catalysis or using anionic and polyesterification catalysts, and in 6-hexanelactam as a solvent. Applicability of this functionalization method was discussed with respect to a broad spectrum of formed products, competition of lactam oligomerization in the presence of basic catalysts, prepn. of the initiator component for 2-component polymn. systems, and in-situ functionalization during polymn.
 IT **54112-23-1**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alcoholysis of, by polypropylene glycol, kinetics of)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

*Same as
 #10*



L77 ANSWER 28 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1992:450501 CAPLUS
 DN 117:50501
 TI Thermoplastic polyurethane composition for manufacturing watchbands
 IN Zavarzina, Z. Ya.; Skorobogatko, N. I.; Petrina, Z. A.; Popova, Z. G.;
 Prokopova, T. V.; Glushkova, L. V.
 PA USSR
 SO U.S.S.R.
 From: Otkrytiya, Izobret. 1991, (24), 93.
 CODEN: URXXAF
 DT Patent
 LA Russian
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SU 1659437	A1	19910630	SU 1988-4460473	19880523
PRAI	SU 1988-4460473		19880523		

AB The title compn., having enhanced resistance to solar radiation comprises MDI-based thermoplastic polyurethane 100; TiO₂ 1-5; 2-(2-hydroxy-5-methylphenyl)benzotriazole stabilizer 1-3; 4,4'-diphenylmethanebis(2,2,6,6-tetramethyl-1-piperidinecarboxamide) or 4,4'-diphenylmethane bis(2,2,6,6-tetramethylpiperidyl carbamate) stabilizer 1-2; pentaerythrityl tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] stabilizer 0.5-1.5; and phthalocyanine blue dye 0.005-2 wt. parts.

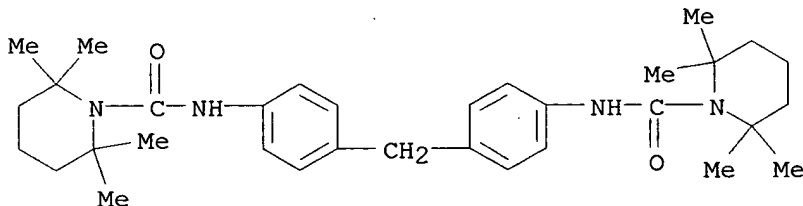
IT **91815-68-8**

RL: USES (Uses)

(light stabilizers, for thermoplastic polyurethane)

RN 91815-68-8 CAPLUS

CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)]



Same as #45

L77 ANSWER 29 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1992:61225 CAPLUS
 DN 116:61225
 TI Flexible heat-resistant thermosetting resin moldings
 IN Matsuzaki, Kunimitsu; Kaneko, Shoji; Nakamura, Masashi; Moriguchi, Kazufusa; Kitagawa, Katsuji
 PA Somar Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

*Same as
#10*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03239717	A2	19911025	JP 1990-35469	19900216
	JP 07103313	B4	19951108		
PRAI	JP 1990-35469		19900216		

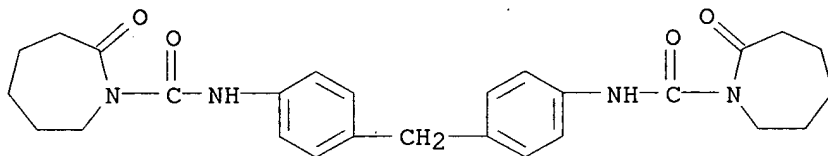
AB Title moldings are prepd. from thermosetting resins having functional groups reactive with cyanate groups, polyfunctional cyanate compds. optionally in combination with polyfunctional maleating compds., melt viscosity regulators which are low-mol. wt. compds. or oligomers having .gtoreq.1 functional group reactive with polyfunctional cyanate compds. and/or thermoplastic resins, inorg. fillers, and org. peroxides and/or polyisocyanates. Thus, sapon. EVA polymer 100, BT 2170 50, a leveling agent 0.3, dicumyl peroxide 0.5, di(.epsilon.-caprolactam)-blocked MDI 0.4, and poly(.epsilon.-caprolactone)diol (I) 20 parts were used to prep. a film having T-type peeling strength 15 kg/25 mm, vs. 8 kg/25 mm without I.

IT 54112-23-1

RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agents, for sapon. ethylene-vinyl acetate copolymer-maleimide-triazine resin reaction products)

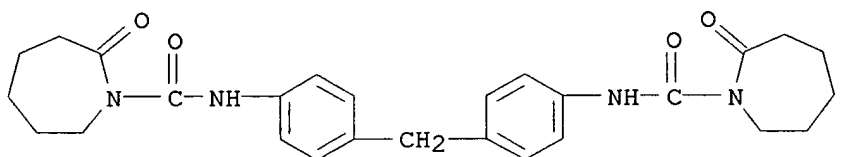
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 30 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1992:42916 CAPLUS
 DN 116:42916
 TI Determination of blocked isocyanates in impregnating mixtures for conveyor belt fabrics
 AU Mal'tseva, V. S.; Gabduvalieva, A. K.
 CS USSR
 SO Kauchuk i Rezina (1990), (8), 20-2
 CODEN: KCRZAE; ISSN: 0022-9466
 DT Journal
 LA Russian
 AB An improved anal. method was developed for detn. of caprolactam- or phenol-blocked isocyanates in impregnating mixts. (e.s., DMVP 10 Kh-SF 282-blocked isocyanate) for conveyor belt fabrics. Accuracy of the method was evaluated for MDI blocked by .epsilon.-caprolactam or PhOH. The method was recommended.
 IT **54112-23-1**
 RL: ANT (Analyte); ANST (Analytical study)
 (detn. of, in impregnating mixts. for conveyor belts, method for)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as #10



L77 ANSWER 31 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1992:8007 CAPLUS

DN 116:8007

TI Expandable urethane-containing powder coating composition, method of coating pipes and boxes with heat-insulating foam, and composite material obtained thereby

IN Sano, Katuya; Hasegawa, Takeshi; Kittaka, Kiyoshi; Sakuraoka, Atushi; Kitagawa, Katsuji; Miyake, Tetsuo; Moriguchi, Kazutomo

PA Somar Corp., Japan

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5047439	A	19910910	US 1988-279057	19881202
	JP 02043273	A2	19900213	JP 1988-193632	19880803
	JP 06102762	B4	19941214		
	JP 02042297	A2	19900213	JP 1988-193633	19880803
	JP 07062519	B4	19950705		
PRAI	JP 1987-307108		19871203		
	JP 1988-60845		19880315		
	JP 1988-193632		19880803		
	JP 1988-193633		19880803		

AB An expandable, powder coating compn. comprises (a) a thermoplastic resin contg. a hydroxyl group-contg. polymer, (b) a crosslinking agent contg. a polyisocyanate compd. which is capable of reacting with the hydroxyl groups of the polymer to crosslink the polymer at a temp. higher than the m.p. of the thermoplastic resin and which is solid at room temp., and (c) a blowing agent capable of decomp. and generating a gas when heated to a temp. higher than the m.p. of the thermoplastic resin. Powder coating with the coating compn. can give a heat-insulating, foamed sheath or lining over the surface of a metal tube or box to be used in air conditioners.

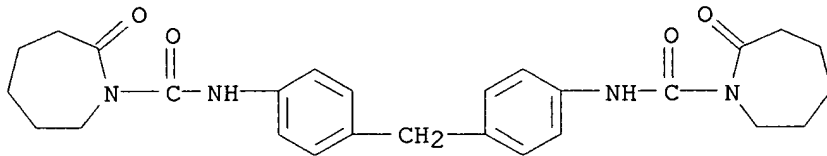
IT 54112-23-1

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, for cellular powd. thermally insulating polymeric polyol coatings for pipes and boxes)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as
#10

L77 ANSWER 32 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:515693 CAPLUS
 DN 115:115693
 TI Modified polyamides and their preparation
 IN Stehlicek, Jaroslav; Sebenda, Jan
 PA Czech.
 SO Czech., 8 pp.
 CODEN: CZXXA9
 DT Patent
 LA Czech
 FAN.CNT 1

*Same as
#10*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 268267	B1	19900314	CS 1987-4266	19870610
PRAI	CS 1987-4266		19870610		

AB Modified nylon 6 with enhanced dry impact resistance consists of 65-97% linear, branched, or crosslinked polyamide chains and 3-35% linear, branched, or crosslinked polybutadiene (mol. wt. 300-10,000) contg. <40% acrylonitrile units, where .gtoreq.3% of the chains are bound on .gtoreq.1 end with polyamide chains through an amide, ester, urethane, or urea group. The title compd. is prepd. by anionic polymn. of caprolactam in the presence of polybutadiene or butadiene-acrylonitrile copolymer (I), 0.1-8 mol.% polyfunctional (.gtoreq.2) activator (N-acyllactam deriv. of polycarboxylic acid, polyisocyanate, or its N-carbamoyllactam deriv.), and 0.1-6 mol% basic catalyst at 130-200.degree.. The components are either mixed before polymn. or .gtoreq.5% functional groups of polybutadiene or I are first allowed to react with the activator and 0-5 mol % basic catalyst related to the functional groups. Thus, 1.13 g Hycar ATBN 1300 x 16 (av. mol. wt. 2048) contg. 16% acrylonitrile and 0.393 g N,N'-isophthaloyl biscaprolactam was heated in THF to 80.degree. for 144 h, evapd., mixed with 4.52 g caprolactam and 1.1 mmol caprolactam Na salt, and polymd. at 140.degree. for 7 h to give tough polyamide (contg. 20 wt.% elastomeric component) insol. in m-cresol.

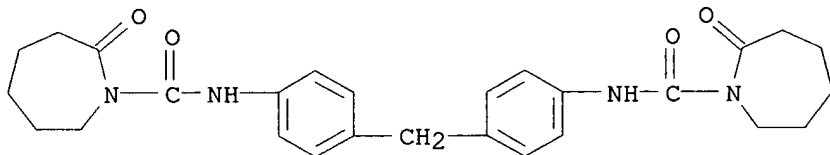
IT **54112-23-1**

RL: CAT (Catalyst use); USES (Uses)

(catalyst, for block polymn. of caprolactam with nitrile rubber)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 33 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1991:460572 CAPLUS

DN 115:60572

TI Radiation-chemical transformation of foam-plastic based on aminoimide oligomer under gamma-irradiation in air

AU Lyashevich, V. V.; Trofimova, N. I.; Yurchenko, V. G.

CS USSR

SO Khimiya Vysokikh Energii (1991), 25(2), 127-31

CODEN: KHVKA0; ISSN: 0023-1193

DT Journal

LA Russian

AB Foam-plastic based on a reaction product of N,N'-(4,4'-diphenylmethane)-bis-maleimide and 4,4'-diaminodiphenylmethane was irradiated in air with .gamma.-radiation at dose range .ltoreq.100 MGy (dose rate 2.7 Gy/s). Gaseous products at radiation dose 1 MGy consists of CO (G = 0.02) and CO₂ (G = 1.165 mol/100 eV), at 2.5 MGy these products also contained H₂, at 10 MGy CH₄. Radiation-chem. transformations comprised complex reactions including hetero- and homolytic splitting of the polymer chains, with oxidn. processes being the most important. Radiation processes induced by doses .ltoreq.100 Gy had no significant effect on the mech. and thermophys. properties of the plastic samples, indicating high radiation stability of this material.

IT **39664-22-7**

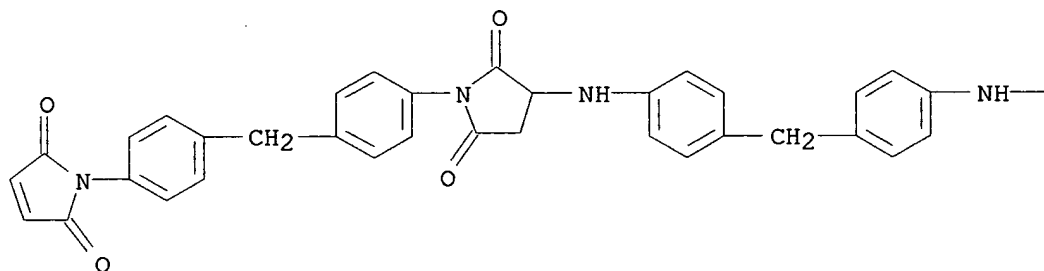
RL: PROC (Process)

(radiation-chem. transformations of)

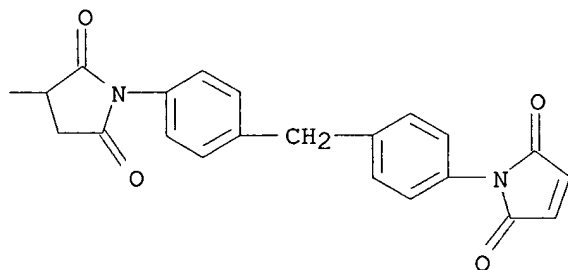
RN 39664-22-7 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[methylenebis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 34 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1990:499518 CAPLUS

DN 113:99518

TI Cellular foam-coated thermal-insulating boxes for coolants and heat media

IN Sano, Katsuya; Hasegawa, Takeshi; Kitsutaka, Kiyoyoshi; Sakuraoka,

Atsushi; Kitagawa, Katsuji; Miyake, Tetsuo; Moriguchi, Kazufusa

PA Nippondenso Co., Ltd., Japan; Somar Corp.

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02042297	A2	19900213	JP 1988-193633	19880803
	JP 07062519	B4	19950705		
	US 5047439	A	19910910	US 1988-279057	19881202
	CA 1309554	A1	19921027	CA 1988-584814	19881202
	IN 173415	A	19940430	IN 1989-CA614	19890731
PRAI	JP 1987-307108		19871203		
	JP 1988-60845		19880315		
	JP 1988-193632		19880803		
	JP 1988-193633		19880803		

Same
as
#10

AB Title thermal-insulating boxes are prepd. by coating the boxes with a powder coating material contg. a OH-contg. thermoplastic resin, a polyisocyanate and an optional org. peroxide, and a blowing agent. Mixing EVA (80% saponid.) 100, CaCO₃ 30, azodicarbonamide (I) 5, I contg. foaming aid 5, ZnO 3, caprolactam-blocked MDI 7.1, dicumyl peroxide 1.7, and C black 0.5 part, adding 0.15% (based on the total compn.) flow enhancer, extruding, pelletizing, pulverizing and powder coating on an Al box at 200.degree. produced a cellular coating with good adhesion.

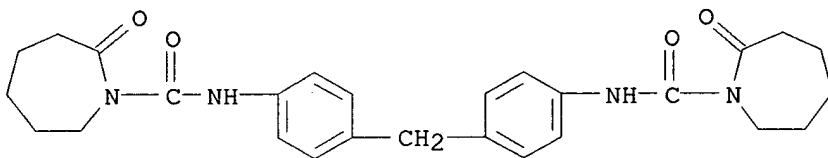
IT **54112-23-1D**, polymers with hydroxy-contg. thermoplastic resins

RL: TEM (Technical or engineered material use); USES (Uses)

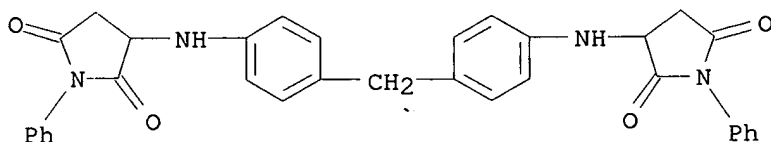
(coatings, for thermal-insulating boxes)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 35 OF 86 CAPLUS COPYRIGHT 2003 ACS
AN 1990:199166 CAPLUS
DN 112:199166
TI Polyimides: synthesis, characterization and applications
AU Grenier-Loustalot, Marie Florence
CS Lab. Chim. Org. Phys., Helioparc Pau-Pyrenees, 64000, Fr.
SO Bulletin des Societes Chimiques Belges (1989), 98(9-10), 603-21
CODEN: BSCBAG; ISSN: 0037-9646
DT Journal
LA French
AB High-resoln. liq. and solid-state ^{13}C -NMR spectroscopy, along with DSC, x-ray diffraction, and FTIR spectroscopy were used to study the mechanism and kinetics of formation of polyimides, as well as their structure and conformation. Spectroscopic study of monomers and model compds. allowed recognition and quantification of the various reactions occurring in various types of polymns. resulting in polyimides.
IT **70689-30-4**
RL: USES (Uses)
(NMR and IR spectra of, as monomer for prepn. of polyimides)
RN 70689-30-4 CAPLUS
CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-phenyl-
(9CI) (CA INDEX NAME)



L77 ANSWER 36 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1989:555153 CAPLUS

DN 111:155153

TI Halogen- and nitrogen-containing heterocyclic resin modifier and modified resin

IN Nakane, Toshio; Kageyama, Yukihiro; Hijikata, Kenji

PA Polyplastics Co., Ltd., Japan

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 314303	A2	19890503	EP 1988-308951	19880927
	EP 314303	A3	19901031		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 01092245	A2	19890411	JP 1987-249195	19871002
	JP 06094500	B4	19941124		
	BR 8805034	A	19890509	BR 1988-5034	19880929
	US 5079284	A	19920107	US 1990-477152	19900208
PRAI	JP 1987-249195		19871002		
	US 1988-244175		19880914		

AB Reactive compds. Y1Z(X)nY2 (X = halogen; Y1, Y2 = I, II, III, IV; R1-3, Z = org. group; n .gtoreq. 1) are useful as modifiers to improve the fire resistance, thermal stability, and flexibility of polymers. Tetrabromobisphenol A 54.4, m-phenylenebisoxazoline 45.2, and Ph3P 0.5 part were mixed and heated in xylene/acetone to obtain a modifier (V). A blend of 87.5% poly(butylene terephthalate) and 12.5% V was injection molded to give specimens with good surface appearance, which had tensile strength 585 kg/cm² and elongation 354% initially, and 237 and 84, resp., after 500 h at 120.degree., and O index 27, vs. 540, 70, 12, 17, and 27, resp., for controls prep'd. similarly using decabromodiphenyl ether instead of V, which showed blisters or modifier bleeding after heating.

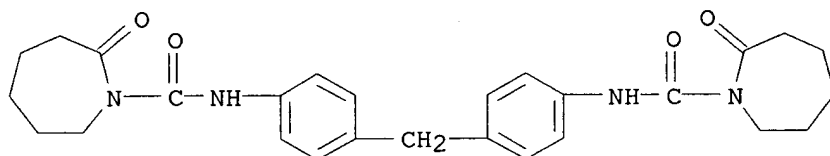
IT 54112-23-1D, reaction products with tetrabromobisphenol A

RL: USES (Uses)

(fireproofing reactive 'plasticizers, heat-stabilizing, for polymers)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 37 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1989:115792 CAPLUS

DN 110:115792

TI The relationship between material chemistry and processing in polyimide/glass prepreg

AU Selover, Scott J.

CS Lockheed Missiles and Sp. Co., Inc., Sunnyvale, CA, USA

SO International SAMPE Technical Conference (1988), 20 (Mater.-Processes: Intercept Point), 326-35

CODEN: ISTCEF; ISSN: 0892-2624

DT Journal

LA English

AB The appearance of polyimide-glass prepreps in the finished circuit boards was correlated with high resin flow and high volatile content in the prepreg. These results indicated that resin voids were not air trapped in the laminate. Anal. of the volatile components from a no. of prepreg types showed that the solvent used in the manufg. of the prepreg could be detected both in the prepreg and in the finished circuit boards. Efforts to remove the volatile fraction from the laminate after curing led to problems in other areas of the manuf. process. Thus, the volatile fraction must be removed from the prepreg prior to lamination. Two chem. types of polyimide prepreps were also detected having different processing requirements. The differences in the chem. of these materials could alter the types of reaction that occurred during the curing of the prepreps.

IT 39664-22-7P

RL: FORM (Formation, nonpreparative); PREP (Preparation)

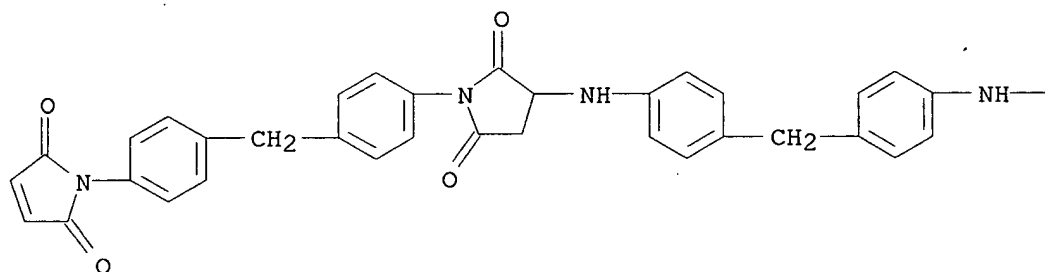
(formation of, in polyimide-glass prepreps, void formation in finished circuit boards in relation to)

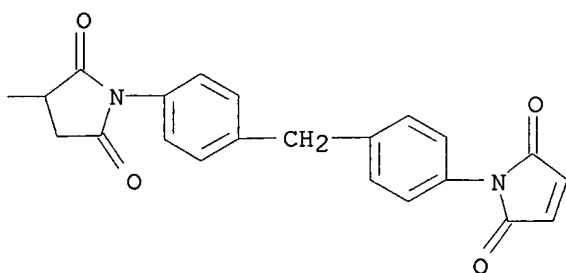
RN 39664-22-7 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[methylenebis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

*See an
33.*

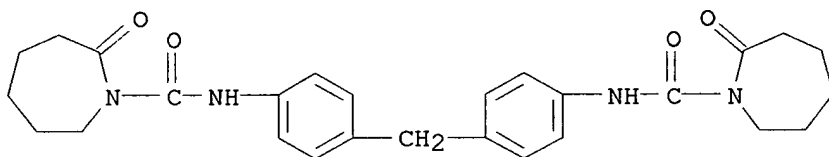
PAGE 1-A





L77 ANSWER 38 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1988:455376 CAPLUS
 DN 109:55376
 TI Chain extension of PET and nylon in an extruder
 AU Akkapeddi, M. K.; Gervasi, J.
 CS Allied-Signal Inc., Morristown, NJ, 07960, USA
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1988), 29(1), 567-70
 CODEN: ACPPAY; ISSN: 0032-3934
 DT Journal
 LA English
 AB A comparative evaluation of various chain extenders [2,2'-m-phenylenebis(1,3-oxazoline), 2,2'-bisoxazoline, bisphenol A diglycidyl ether, caprolactam-blocked MDI, oligomeric polycarbodiimides, terephthaloyl biscaprolactam, and terephthaloyl bislauro lactam] for poly(ethylene terephthalate) and polyamides under normal extruder processing conditions was conducted. The chain extension mechanism was discussed.
 IT **54112-23-1**
 RL: USES (Uses)
 (chain extenders, for poly(ethylene terephthalate) under extrusion)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as #10



L77 ANSWER 39 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1988:206142 CAPLUS

DN 108:206142

TI Treatment of polyester fiber materials for reinforcing rubber

IN Takeda, Minoru

PA Asahi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62243879	A2	19871024	JP 1986-84177	19860414
PRAI	JP 1986-84177		19860414		

AB Polyester fiber materials are impregnated with polyethylenimine (I) or I derivs. and blocked polyisocyanates, then dried, heated, impregnated with resorcinol-formalin-rubber latexes, and heated. The treated fibers show strong adhesion to rubber compns. both initially and after prolonged exposure to high temps. Thus, 10 parts Epomine SP 018 (I) was mixed with 870 parts H₂O and 120 parts DMS 3 (25% dispersion of caprolactam-blocked MDI) to form a first dip compn. Sep., resorcinol 14, 37% formalin 16, 10% aq. NaOH 8, and H₂O 464 parts were combined and mixed with 438 parts vinylpyridine rubber latex and 60 parts H₂O. Polyester cords were impregnated with the I compn., dried at 130.degree., and heated at 160.degree. for 1 min, then impregnated with the latex compn., dried at 150.degree., and heated at 245.degree. for 1 min. The treated cords were embedded in a natural rubber/SBR compn. and molded into tire carcasses. Carcasses vulcanized at 150.degree. for 30 min showed cord adhesion 19.9 kg/cm, and those vulcanized at 180.degree. for 60 min showed cord adhesion 12.3 kg/cm; vs. 15.7 and 6.3 kg/cm, resp., using a first dip without the DMS 3; or 19.3 and 6.6 kg/cm, resp., using an epoxy resin/blocked polyisocyanate first dip, which deposited large amts. of dip waste on the impregnated cords.

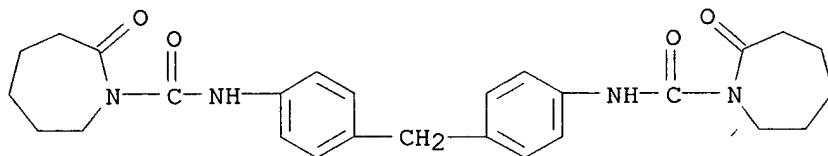
IT 54112-23-1

RL: USES (Uses)

(adhesives contg., with polyethylenimines, for polyester reinforcing fibers in rubber)

RN 54112-23-1 CAPLUS

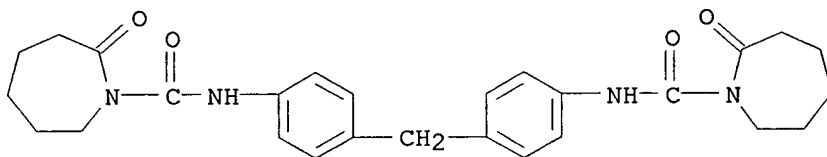
CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as
10

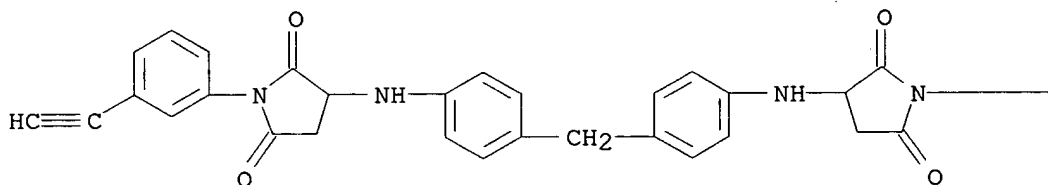
L77 ANSWER 40 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:599744 CAPLUS
 DN 107:199744
 TI Comparison of the activities of catalytic systems in the anionic polymerization of caprolactam using DTA
 AU Kelar, Krystyna
 CS Inst. Technol. Budowy Masz., Politech. Poznanska, Poznan, Pol.
 SO Polimery (Warsaw, Poland) (1987), 32(5), 196-8
 CODEN: POLIA4; ISSN: 0032-2725
 DT Journal
 LA Polish
 AB DTA study of anionic polymn. of caprolactam (I) in the presence of Synhydride (II) as catalyst showed that carbamide derivs. were more effective activators than isocyanates. The catalytic system most advantageous in polymn. during reaction injection molding of I was a mixt. of II with N,N'-hexamethylenedicarbamic acid bisimide with I in an amt. 0.3 and 0.35 mol%, resp.
 IT **54112-23-1**
 RL: CAT (Catalyst use); USES (Uses)
 (catalysts, for anionic polymn. of caprolactam during reaction injection molding)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

*Same as
 # 10*

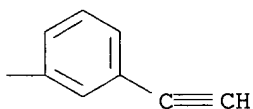


L77 ANSWER 41 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1986:609781 CAPLUS
 DN 105:209781
 TI Acetylene-terminated aspartimides
 AU Hergenrother, P. M.; Havens, S. J.; Connell, J. W.
 CS NASA Langley Res. Cent., Hampton, VA, 23665, USA
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1986), 27(2), 408-9
 CODEN: ACPPAY; ISSN: 0032-3934
 DT Journal
 LA English
 AB Two kinds of acetylene-terminated aspartimides (ATA's) were prep'd. by treating 3-aminophenylacetylene [54060-30-9] with N,N'-bismaleimido-4,4'-diphenylmethane [13676-54-5] or by treating N-(3-ethynylphenyl)maleimide [105280-01-1] with arom. diamines. The ATA's were blended with acetylene-terminated polysulfones to give moldings, adhesives, and fiber-reinforced composites. The cured blends had higher crit. stress intensity factors than those of cured polyimides.
 IT **105247-69-6P 105247-70-9P 105247-71-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and curable blends of, with acetylene-terminated polysulfones)
 RN 105247-69-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-(3-ethynylphenyl)- (9CI) (CA INDEX NAME)]

PAGE 1-A

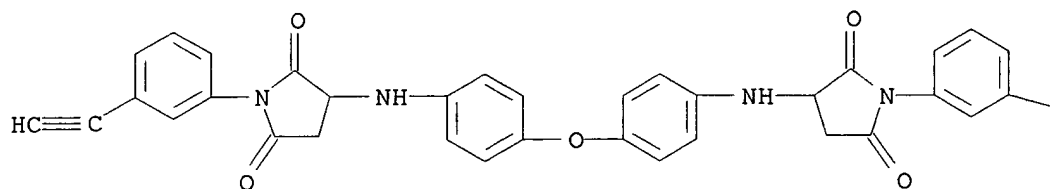


PAGE 1-B

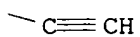


RN 105247-70-9 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[oxybis(4,1-phenyleneimino)]bis[1-(3-ethynylphenyl)- (9CI) (CA INDEX NAME)]

PAGE 1-A



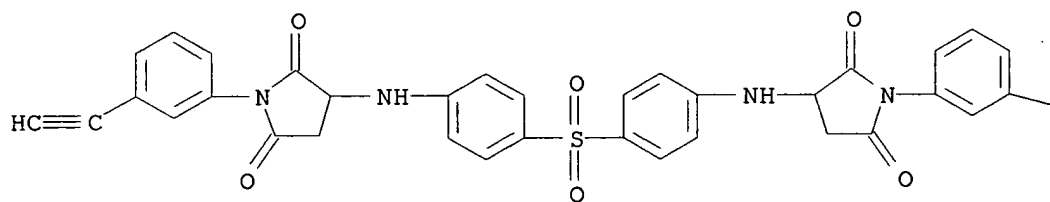
PAGE 1-B



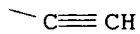
RN 105247-71-0 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3'-[sulfonylbis(4,1-phenyleneimino)]bis[1-(3-ethynylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 42 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1986:592184 CAPLUS

DN 105:192184

TI Polyols containing urea, ester, or amide groups

IN Balle, Gerhard; Groegler, Gerhard; Meckel, Walter

PA Bayer A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3504967	A1	19860814	DE 1985-3504967	19850213
	US 4704447	A	19871103	US 1986-824042	19860130
	EP 191386	A2	19860820	EP 1986-101318	19860201
	EP 191386	A3	19870527		
	EP 191386	B1	19891018		
	R: BE, DE, FR, GB, IT				
	CA 1275417	A1	19901023	CA 1986-501007	19860203
PRAI	DE 1985-3504967		19850213		

OS CASREACT 105:192184

AB The polyols R[NHCONHZ1COZ2Z3(OH)m]n (I) (R = org. residue; Z1 = C3-11 alkylene; Z2 = O, NH; Z3 = polyol or amino alc. residue; m = 1-5; n = 2-6), useful in polyurethane chem., are prep'd. from acyllactams and alcs. Heating 394 g N,N'-(hexamethylenedicarbamoyl)dicaprolactam and 10 g 30% NaOMe soln. in 1 L ethylene glycol at 110.degree. until reaction was complete gave I [R = (CH2)6, Z1 = (CH2)5, Z2 = O, Z3 = CH2CH2, m = 1, n = 2].

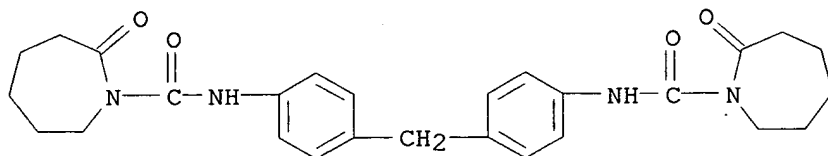
IT 54112-23-1P

RL: PREP (Preparation)

(manuf. of, and reaction with alcs.)

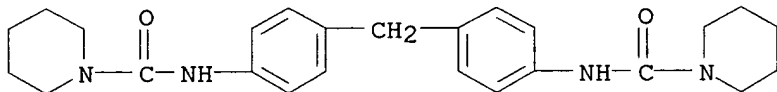
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as
#10

L77 ANSWER 43 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1985:150084 CAPLUS
 DN 102:150084
 TI Correlation of urea structure with thermal stability in model compounds
 AU Skuches, G. S.; Carleton, P. S.
 CS Donald S. Gilmore Res. Lab., Upjohn Co., North Haven, CT, 06473, USA
 SO Journal of Applied Polymer Science (1984), 29(11), 3431-43
 CODEN: JAPNAB; ISSN: 0021-8995
 DT Journal
 LA English
 AB Initial decompn. temps. of various ureas were detd. by thermogravimetry and IR analyses. Ranking of the compds. in order of thermal stability allows correlation between urea structure and resistance to thermal degrdn. N-Alkyl substitution of an arylurea results in the most significant lowering of thermal stability (50-70.degree.C) as compared to the std. (N,N'-diphenylurea [102-07-8]) whereas ortho-substituent effects and electronic effects are present but lesser in magnitude. The large steric effect is postulated to indicate the necessity of rotation of the nitrogen-carbonyl bond during dissocn. in order to establish the proper geometry for isocyanate bond formation.
 IT **38818-25-6**
 RL: PRP (Properties)
 (thermal degrdn. of, structure in relation to)
 RN 38818-25-6 CAPLUS
 CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 45 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1984:511953 CAPLUS
 DN 101:111953
 TI Polyalkyl piperidines
 IN Karrer, Friedrich
 PA Ciba-Geigy A.-G. , Switz.
 SO Eur. Pat. Appl., 29 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 108709	A2	19840516	EP 1983-810447	19831003
	EP 108709	A3	19861008		
	R: DE, FR, GB, IT				
	US 4569997	A	19860211	US 1983-537134	19830929
	JP 60084268	A2	19850513	JP 1983-189125	19831008
PRAI	CH 1982-5924		19821008		

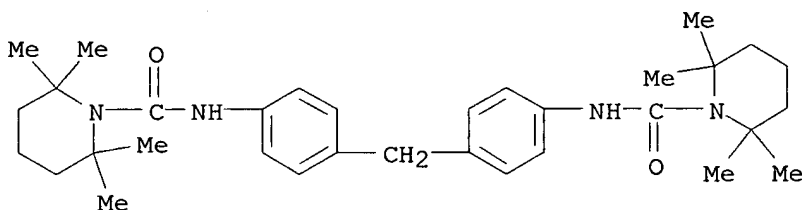
AB Hindered amines are prepd. by reaction of 2,2,6,6-tetramethylpiperidine derivs. with di- or triisocyanates at -20.degree. to +50.degree. in an inert solvent, and are useful as light stabilizers for polymers, esp. binders for lacquers. Thus, 0.2 mol I [53463-86-8] was treated with 0.1 mol hexamethylene diisocyanate [822-06-0] in THF at 22-25.degree., stirred overnight, and worked up to give the carbamoyl compd. (II) [91815-75-7] with m.p. 113-115.degree.. A film (0.1-mm thick) prepd. from polypropylene [9003-07-0] 100, octadecyl .beta.-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate 0.2, Ca stearate 0.1, and II 0.25 part could be photoirradiated for >3420 h before the CO extinction value at 5.85 .mu. reached .apprx.0.3, a value at which a control film became brittle and which was reached in the control after 900 h.

IT **91815-68-8**

RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (light stabilizers, for polymers)

RN 91815-68-8 CAPLUS

CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



L77 ANSWER 46 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1984:211061 CAPLUS

DN 100:211061

TI Chemical bonding between a stabilizing compound and a polymer

IN Karrer, Friedrich; Hofmann, Peter

PA Ciba-Geigy A.-G. , Switz.

SO Eur. Pat. Appl., 56 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 101411	A2	19840222	EP 1983-810348	19830805
	EP 101411	A3	19851127		
	EP 101411	B1	19890125		
	R: BE, DE, FR, GB, IT, NL, SE				
	CA 1253143	A1	19890425	CA 1983-434173	19830809
	JP 59049214	A2	19840321	JP 1983-147284	19830811
	JP 06010229	B4	19940209		
	US 4731393	A	19880315	US 1986-873853	19860611
	JP 06240048	A2	19940830	JP 1993-204796	19930727
	JP 07122003	B4	19951225		
PRAI	CH 1982-4810		19820811		
	US 1983-520379		19830804		
	US 1985-757916		19850722		

AB Triazine derivs. (35) contg. .gtoreq.1 ethylenically unsatd. group and .gtoreq.1 2,2,6,6-tetramethylpiperidyl group/mol. are prepd. for use as reactive stabilizers for polymers, esp. polyolefins. The stabilizers form chem. bonds with the polymers. Thus, the reaction of N,N'-bis(2,2,6,6-tetramethyl-4-piperidyl)-1,6-hexanediamine [61260-55-7] with cyanuric chloride [108-77-0] and allylamine [107-11-9] gave compd. I [85438-51-3]. Polyethylene (II) [9002-88-4] was mixed with 0.4% I and 1.4% dicumyl peroxide and heated 15 min at 180.degree. to form chem. bonds between I and II and crosslink the II, giving modified II having breaking elongation 55%. During aging at 150.degree. in air, the breaking elongation decreased to 50% of the original value after 42 days, compared with <1 day for peroxide-crosslinked II contg. no I. When the crosslinked, I-contg. II was extd. with boiling CHCl3 for 5 days before the aging test, the breaking elongation decreased to 50.degree. of the original value after 14 days.

IT **90335-24-3P**

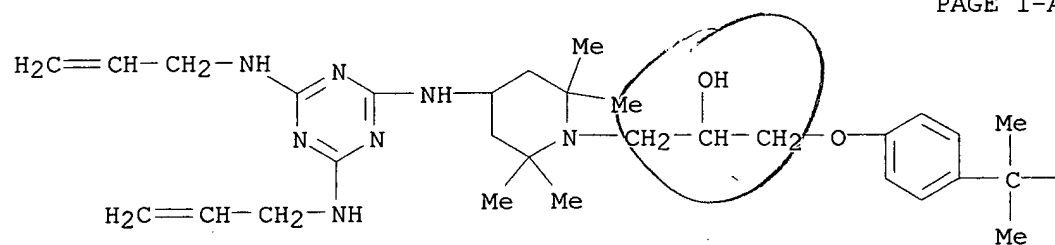
RL: PREP (Preparation)

(prepn. of, as reactive antioxidants for polymers)

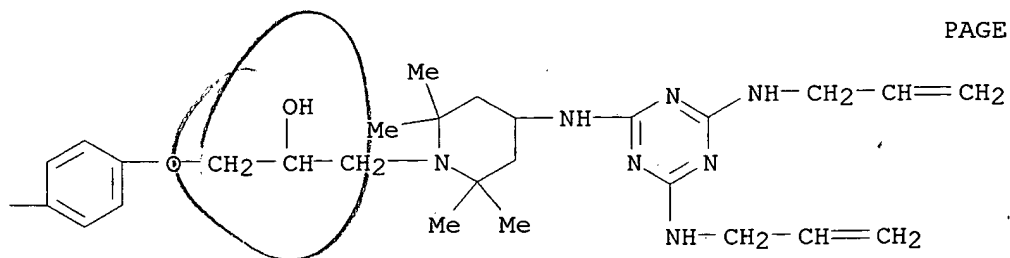
RN 90335-24-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-[[4,6-bis(2-propenylamino)-1,3,5-triazin-2-yl]amino]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 47 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1984:104452 CAPLUS
 DN 100:104452
 TI Waterproofing agents for epoxy resin adhesives
 PA Yokohama Rubber Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

*Same as
#43*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58118875	A2	19830715	JP 1982-1696	19820111
	JP 63009558	B4	19880229		
PRAI	JP 1982-1696		19820111		

AB The title agents contain alkylureas, silanes bearing epoxide, amino, or SH groups and 3 hydrolyzable groups, and other thiols or their Na, K, or NH₄ salts (urea- and SH-silane mol ratio 2-7:1). Thus, bisphenol A-epichlorohydrin copolymer [25068-38-6] 50, alkyl diglycidyl ethers 40, carboxy-terminated nitrile rubber 10, triethylenetetramine crosslinker 8, CaCO₃ filler 50, (3,4-dichlorophenyl)dimethylurea [330-54-1] 6.0, [3-glycidyloxy)propyl]trimethoxysilane [2530-83-8] 2, and 2-mercaptobenzothiazole [149-30-4] 4.3 parts were mixed, used to bond stainless steel wire mesh to glass, and cured 48 h at room temp. and 2 h at 100.degree. to give a laminate withstanding >30 days in water at 80.degree..

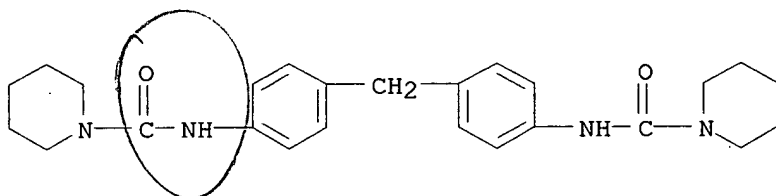
IT **38818-25-6**

RL: USES (Uses)

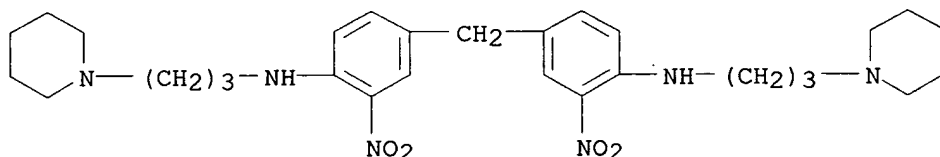
(waterproofing agents, for epoxy resin adhesives)

RN 38818-25-6 CAPLUS

CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



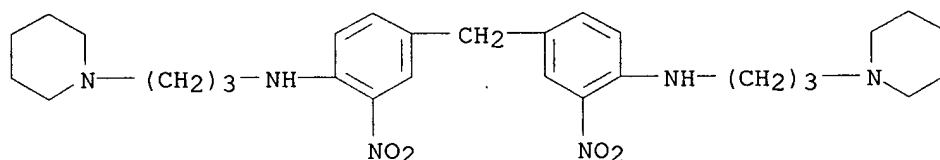
L77 ANSWER 48 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1983:594548 CAPLUS
 DN 99:194548
 TI Synthesis of aminonitrodiphenyls, aminonitrodiphenylmethane and
 aminonitrobenzophenone and their antiprotozoal activities
 AU Parthasarathy, P. C.; Mudliar, Sheela; Saindane, M. T.; Ray, D. K.;
 Shrivastava, V. B.; Datta, A. K.
 CS Res. Cent., Ciba-Geigy, Bombay, 400 063, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including
 Medicinal Chemistry (1983), 22B(3), 295-6
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 99:194548
 AB Biphenyl derivs. I (R = Cl, X = CH₂, CO, bond) reacted with H₂NCH₂CH₂NEt₂
 or R₁H to give I (R = R₁, NHCH₂CH₂NEt₂). I (X = bond, R = R₁) was as
 active as metronidazole against hepatic and intestinal inflammation by
 Entamoeba histolytica in hamsters, but had an unacceptable degree of
 toxicity.
 IT **87686-32-6P 87686-33-7P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and amebicidal activity of)
 RN 87686-32-6 CAPLUS
 CN 1-Piperidinepropanamine, N,N'-[methylenebis(2-nitro-4,1-phenylene)]bis-
 (9CI) (CA INDEX NAME)



RN 87686-33-7 CAPLUS
 CN 1-Piperidinepropanamine, N,N'-[methylenebis(2-nitro-4,1-phenylene)]bis-,
 ethanedioate (1:2) (9CI) (CA INDEX NAME)

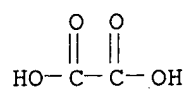
CM 1

CRN 87686-32-6
 CMF C29 H42 N6 O4



CM 2

CRN 144-62-7
 CMF C2 H2 O4



L77 ANSWER 49 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1983:216761 CAPLUS
 DN 98:216761
 TI Water-resistant adhesives
 PA Yokohama Rubber Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

Same as #45

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57202365	A2	19821211	JP 1981-87463	19810609
	JP 59011630	B4	19840316		
PRAI	JP 1981-87463		19810609		

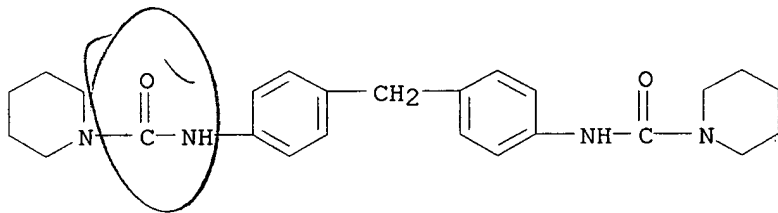
AB An epoxy resin adhesive compn. with improved water resistance comprises (1) an epoxy resin, (2) a compd. having .gtoreq.1 urea linkages, and (3) 0.5-5% of a silane having org. functional groups, where the ratio of the urea linkages in 2 to the functional groups in 3 is 2-7:1. Thus, a mixt. of 1-(3,4-dichlorophenyl)-3,3-dimethylurea (I) [330-54-1] 5.9, .gamma.-glycidoxypopyltrimethoxysilane [2530-83-8] 2, 2-heptadecylimidazole [23328-87-2] 6, 40:50:10 (by wt.) alkyl glycidyl ether (epoxy equiv. 300)-bisphenol-A-epichlorohydrin copolymer [25068-38-6] (epoxy equiv. 190)-Hycar CTBN mixt. 100, and CaCO₃ 50 parts was coated onto a degreased glass plate (25 .times. 80 .times. 5 mm) with an embedded stainless steel mesh (40 mesh) in the coating, and cured by heating 30 min at 120.degree. to give a test piece. The mesh could not be removed without resistance after 60 days immersion in water at 80.degree., whereas it was removed without resistance after 1 day immersion when the amt. of I was decreased to 2 parts.

IT **38818-25-6**

RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agents, for epoxy resin adhesives contg. silane coupler)

RN 38818-25-6 CAPLUS

CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 50 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1983:179963 CAPLUS

DN 98:179963

TI General principles of the change in the rate of anionic polymerization of caprolactam in the presence of aromatic carbamoylcaprolactams

AU Frolov, V. G.

CS "Plastmassy" Nauchno-Proizvod. Ob'edin., USSR

SO Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1983), 25(2), 134-8

CODEN: VYSBAI; ISSN: 0507-5483

DT Journal

LA Russian

AB Generalizations are made on the basis of Hammett equations for the influence of substituents in carbamoylcaprolactams I (R = Ph, 4-ClC₆H₄, 3-ClC₆H₄, 3,4-Cl₂C₆H₃) and II (Z = 2,4-tolylene, 4,4'-diphenylmethane radical, 3,3'-dichlorodiphenylmethane radical) on their activating influence in the anionic polymn. of caprolactam [105-60-2]. Introducing electron-acceptor substituents in the arom. rings of I and II decreased the overall polymn. rate. The position of the substituent also influenced the polymn. rate. A correlation was obsd. between the electron-acceptor properties of the entire carbamoyl group and the acidity of the NH group, leading to decreased concn. of caprolactam anions.

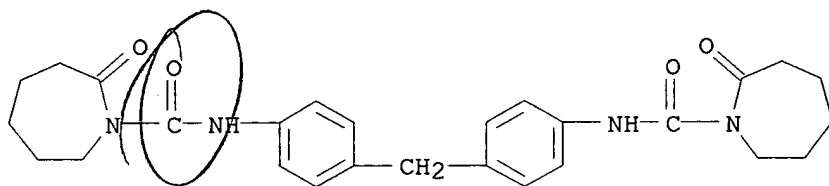
IT 54112-23-1 77771-42-7

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for anionic polymn. of caprolactam, kinetics and substituent effect in relation to)

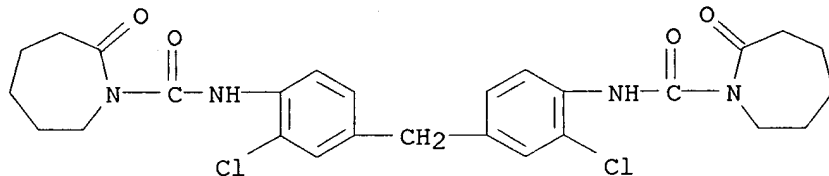
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



RN 77771-42-7 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-[methylenebis(2-chloro-4,1-phenylene)]bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 51 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1983:34997 CAPLUS

DN 98:34997

TI Kinetics of anionic polymerization of lactams. (Solution of non-isothermal kinetic problems by the inverse method)

AU Malkin, A. Ya.; Ivanova, S. L.; Frolov, V. G.; Ivanova, A. N.; Andrianova, Z. S.

CS Res. Inst. Plast., Moscow, 111112, USSR

SO Polymer (1982), 23(12), 1791-800

CODEN: POLMAG; ISSN: 0032-3861

DT Journal

LA English

AB Non-isothermal studies were used to obtain kinetic data on the anionic polymn. of .epsilon.-caprolactam (I) [105-60-2] and .omega.-dodecalactam (II) [947-04-6]. Data were obtained by measuring changes in reaction temp., under conditions of heat exchange with the surroundings and by solving the inverse thermophys. problem. This soln. yielded kinetic consts., which when substituted into heat conduction and kinetic equations minimized the deviations of calcd. temp. dependences on time and deviations in exptl. data. Thus, in the qual. study of the polymn. of lactams, numerical values of the basic kinetic consts. in the microkinetic scheme were detd. Some new effects, such as self-acceleration in polymn. of I and increase of the apparent activation energy at high degrees of conversion in polymn. of II were detected. The approach may be useful in study other polymns.

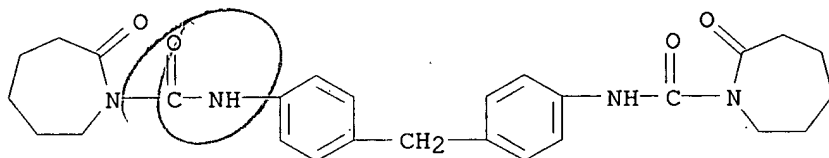
IT 54112-23-1

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polymn. of lactams, kinetics in relation to)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Same as #10

L77 ANSWER 52 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1982:599481 CAPLUS

DN 97:199481

TI Textile printing compositions containing a crosslinking agent

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

Same as #10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57089680	A2	19820604	JP 1980-163416	19801121
PRAI	JP 1980-163416		19801121		

AB Printing compns. contg. an alkali-sol. copolymer contg. 3-10% carboxylic compd. units and 1-10% functional compd. units as a thickener, an alkali, an aq. pigment dispersion, and a crosslinking agent are useful for printing fabrics with improved color yield and colorfastness. Thus, 4.0 parts methacrylic acid (I) was copolymd. with N-methylolacrylamide (II) 1.5, Et acrylate (III) 18.0, and Bu acrylate (IV) 18.0 parts to give a copolymer (V) [67785-43-7]. Polyethylene glycol nonylphenyl ether (VI) 0.6, phthalocyanine blue 20, and H₂O 70 parts were mixed to give a pigment compn. (A), and V emulsion 30, VI 0.6, aq. 25% NH₃ 0.5, and H₂O 19 parts were mixed to give a thickener compn. Polyester-cotton blend (65:35) was screen printed with a paste contg. A compn. 10, the mixed thickener compn. 89.5, and formaldehyde-melamine copolymer [9003-08-1] 0.5 part and heat-treated 2 min at 150.degree.. The washfastness and color yield of the printed fabric were good, whereas color yield was poor for a fabric printed with a similar compn. contg. V prepd. from I 0.6, II 0.3, III 14.0, and IV 14.0 parts.

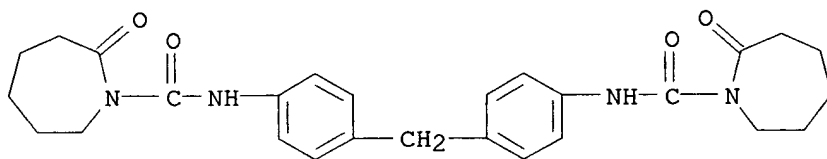
IT 54112-23-1

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, acrylate copolymer printing compns. contg.)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 53 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1982:564479 CAPLUS
 DN 97:164479
 TI Printing compositions containing organosiloxanes.
 PA Dainippon Ink and Chemicals, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57095383	A2	19820614	JP 1980-168000	19801201
PRAI	JP 1980-168000		19801201		

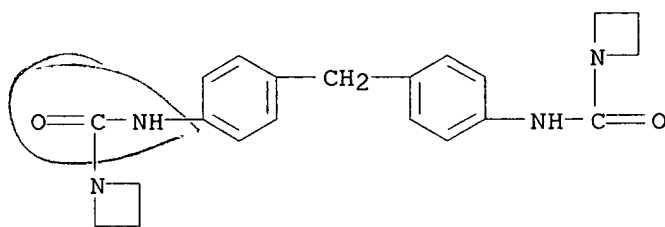
AB A pigment-contg. aq. compn. contg. an aq. pigment-polymer mixt., a poly(organosiloxane), and an alkali-thickenable polymer emulsion and optionally contg. a di- or polyfunctional crosslinking agent are useful for printing textiles with improved crocking fastness and soft handle. Thus, 4.0 parts methacrylic acid was polymd. with N-methylolacrylamide (I) 1.5, Et acrylate (II) 18.0, and Bu acrylate (III) 18.0 parts to give a polymer (IV) [67785-43-7]. Acrylic acid (2.0 parts) was polymd. with I 0.3, II 14.0, and III 14.0 parts to give a polymer (V) [33638-19-6]. An aq. compn. (10 parts) contg. 20% red azo pigment and 20% IV emulsion was mixed with a thickener contg. 30% V emulsion 88, poly(dimethylsiloxane) (VI) 1, and formaldehyde-melamine copolymer (VII) [9003-08-1] 1 part. Polyester-cotton blend (65:35) was screen printed with the above compn. and heat-treated 2 min at 150.degree. to give a printed fabric with soft handle and dry crocking fastness rating (JIS L-0849) 4, compared with 3-4 and rigid handle for a fabric printed with a similar compn. without VI and VII.

IT **83346-69-4**

RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agents, printing compns. contg., for polyester-cotton blends)

RN 83346-69-4 CAPLUS

CN 1-Azetidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 54 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1982:492968 CAPLUS
 DN 97:92968
 TI One-component storage-stable 6-caprolactam solid reaction solution
 IN Zahorovsky, Svatoslav; Herman, Oldrich
 PA Czech.
 SO Czech., 2 pp.
 CODEN: CZXXA9
 DT Patent
 LA Czech
 FAN.CNT 1

*Same as
#10*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 191368	B	19790731	CS 1977-8777	19771228
PRAI	CS 1977-8777		19771228		

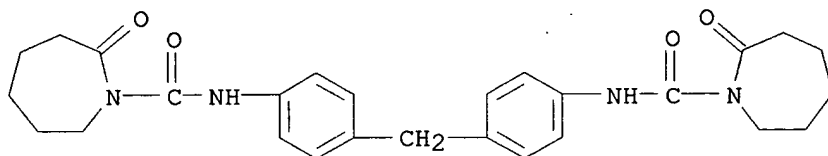
AB The title .epsilon.-caprolactam (I) [105-60-2] soln. with an improved shelf life is obtained by addn. of 0.1-1 mol% of a latent polymn. catalyst such as arom. diisocyanates or their addn. products with I (1:0.9-1.1) at 60-90.degree. followed by rapid cooling to <40.degree.. Thus, I contg. 0.5 mol% Na caprolactamate was treated at 68.degree. with 0.3 mol% diphenylmethane-4,4'-biscarbamidocaprolactam [54112-23-1], homogenized, and cooled to 25.degree.. This solid soln. was stored for 6 mo, then melted, poured into a form preheated to 180.degree., and polymd. The polyamide obtained contained only 9% low-mol.-wt. fractions extractable by water.

IT 54112-23-1

RL: CAT (Catalyst use); USES (Uses)
 (catalyst, latent, caprolactam contg., storage-stable)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 55 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1982:163675 CAPLUS
 DN 96:163675
 TI Polyalkylpiperidine derivatives of s-triazine
 IN Rody, Jean
 PA Ciba-Geigy Corp. , USA
 SO U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 8,135, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4294963	A	19811013	US 1979-57673	19790716
PRAI	CH 1978-1402		19780208		
	US 1979-8135		19790131		

AB Reaction products of polyalkylpiperidine derivs. of 1,3,5-triazines with dihalides or polyepoxides are stabilizers, esp. light stabilizers, with low volatility and migration. Thus, stirring 28.5 g N,N',N''-tributyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)melamine [71981-32-3], 4 g 1,4-butanediol diglycidyl ether [2425-79-8], and 100 mL C₈H₁₇OH 10 h at 160.degree. and stripping in vacuo gave a slightly yellow adduct [80459-61-6].

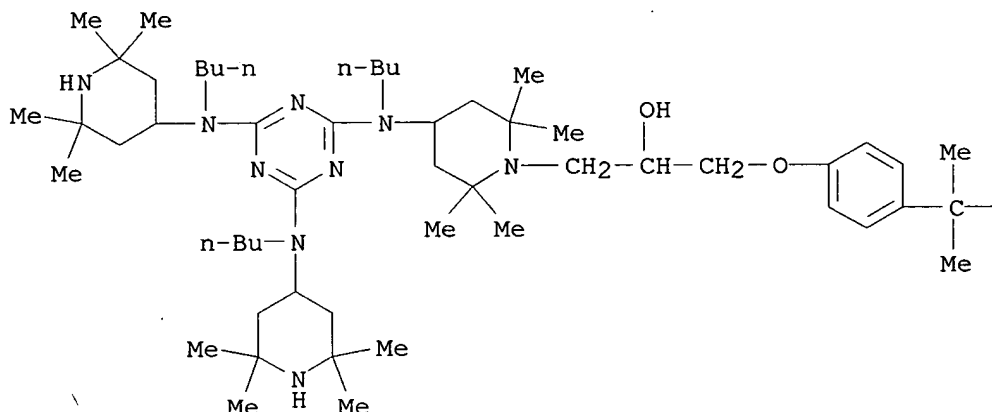
IT **80459-60-5**

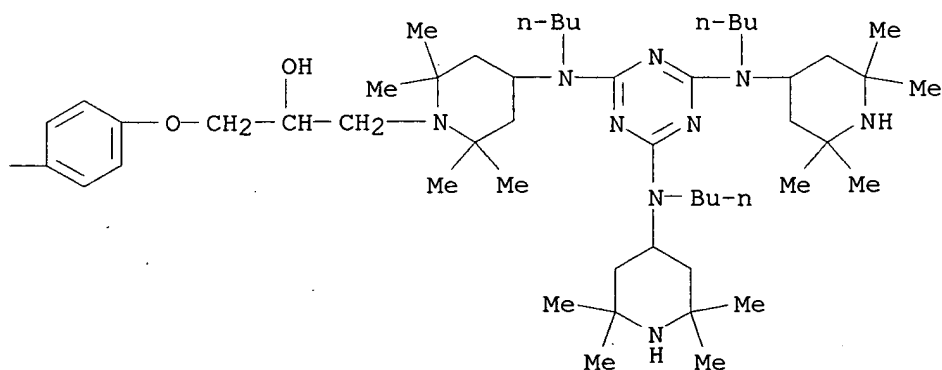
RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (light stabilizers, for polymers)

RN 80459-60-5 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-[[4,6-bis[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]butylamino]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A





L77 ANSWER 56 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1982:53221 CAPLUS
 DN 96:53221
 TI Curing agents for epoxy resins
 PA Matsushita Electric Works, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56118415	A2	19810917	JP 1980-21889	19800222
PRAI	JP 1980-21889		19800222		

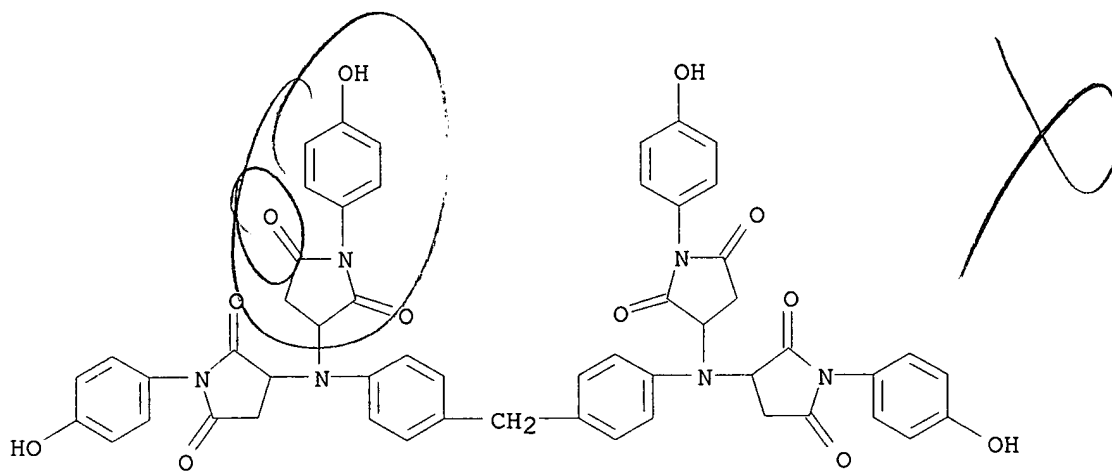
AB A curing agent for epoxy resins is a diamine I (Z = divalent group contg. .gtoreq.1 arom. or heterocyclic ring; R, R1 = H, alkyl; the phenol ring may be substituted by alkyl, OH, or halogen; the 2 substituents on Z need not be the same). Thus, 0.335 mol 4,4'-diaminodiphenylmethane [101-77-9] and 1.34 mol N-(p-hydroxyphenyl)maleimide (II) [7300-91-6] were heated at 180-220.degree. for 60 min to obtain a dark brown curing agent [**80451-45-2**] with mol. wt. 950, which was sol. in N-methyl-2-pyrrolidone, Me2SO, DMF, dioxane, MeCOEt, and MeOH. A mixt. of 100 g Epikote 154 [63939-13-9] and 125.5 g of the curing agent was heated at 170.degree. for 2 h and at 200.degree. for 3 h. The product had Tg 255.degree. and gel time (50% acetone soln., 160.degree.) 7.0 min. Epikote 828 contg. a reaction product of 3,3'-diaminobenzidine and II had Tg 250.degree. and gel time 3.5 min.

IT **80451-45-2**

RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agents, for epoxy resins, prepn. of)

RN 80451-45-2 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3',3'',3'''-[methylenebis(4,1-phenylenenitrilo)]tetrakis[1-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



L77 ANSWER 57 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1982:53172 CAPLUS

DN 96:53172

TI Alicyclic isocyanates

IN Yamamoto, Ryuichi; Hirai, Yutaka; Takagi, Akinobu; Tashima, Zyunzi

PA Mitsui Toatsu Chemicals, Inc., Japan

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 23649	A1	19810211	EP 1980-104234	19800718
	EP 23649	B1	19830706		
	R: DE, FR, GB, IT				
	JP 56016455	A2	19810217	JP 1979-91625	19790720
	JP 62041220	B4	19870902		
	US 4299766	A	19811110	US 1980-170333	19800721
PRAI	JP 1979-91625		19790720		

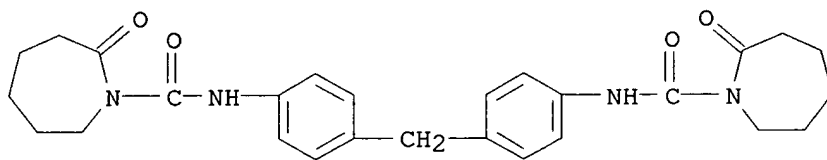
AB Lactam-blocked, alicyclic isocyanates, useful in urethane coatings, as crosslinkers for epoxy resins, etc., are prep'd. by hydrogenating lactam-blocked, arom. isocyanates over Rh catalysts. Thus, hydrogenating 30.5 g N,N'-[(methylenedi-p-phenylene)dicarbamoyl]dicaprolactam [54112-23-1] in 250 mL iso-PrOH over 3.05 g 5% Rh/active C at 70-80.degree./50 atm for 68 min gives 30.6 g N,N'-[(methylenedi-4,1-cyclohexylene)dicarbamoyl]dicaprolactam (I) [68925-38-2]. Distg. 60 g I from 100 mL paraffin at 1.0 mm gives 24.1 g 4,4'-dicyclohexylmethane diisocyanate [5124-30-1] with isomer distribution trans-trans 32.1, trans-cis 18.5, and cis-cis 49.4%, compared with 53.4, 7.3, and 39.3, resp., when CH₂(C₆H₄NH₂-p)₂ is hydrogenated and phosgenated.

IT 54112-23-1 66168-47-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrogenation of, catalysts for)

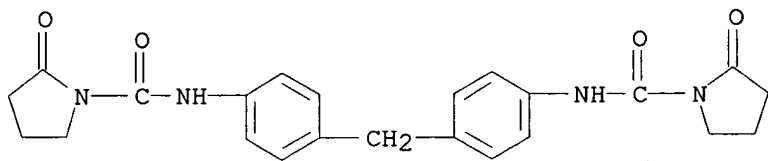
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-[(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)]



RN 66168-47-6 CAPLUS

CN 1-Pyrrolidinecarboxamide, N,N'-[(methylenedi-4,1-phenylene)bis[2-oxo- (9CI) (CA INDEX NAME)]



L77 ANSWER 58 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1981:209297 CAPLUS

DN 94:209297

TI Kinetic study of the anionic polymerization of caprolactam in the presence of carbamoyl caprolactams

AU Frolov, V. G.; Malkin, A. Ya.

CS USSR

SO Khimicheskaya Promyshlennost, Seriya: Proizvodstvo i Pererabotka Plastmass i Sinteticheskikh Smol (1980), (10), 13-17
CODEN: KPSSDO; ISSN: 0131-5439

DT Journal

LA Russian

AB The rate of anionic polymn. of caprolactam (I) [105-60-2] in the presence of carbamoylcaprolactam activators of various structure was studied and a kinetic equation was derived to describe I polymn. in the presence of such activators. The polymn. rate depended on the structure of the activators and was highest in the presence of hexamethylenebis(carbamoylcaprolactam) [5888-87-9].

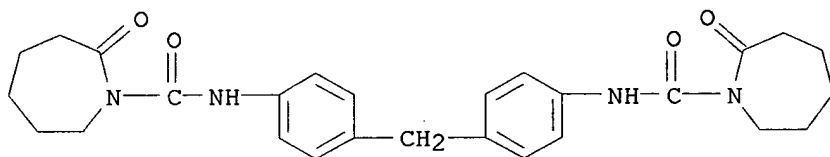
IT 54112-23-1 77771-42-7

RL: CAT (Catalyst use); USES (Uses)

(activators, for anionic polymn. of caprolactam, kinetics in relation to)

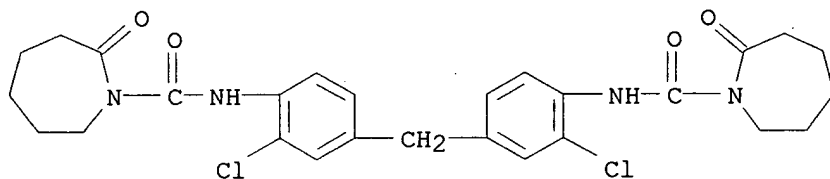
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



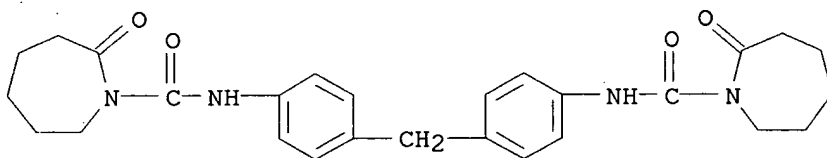
RN 77771-42-7 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-[methylenebis(2-chloro-4,1-phenylene)]bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



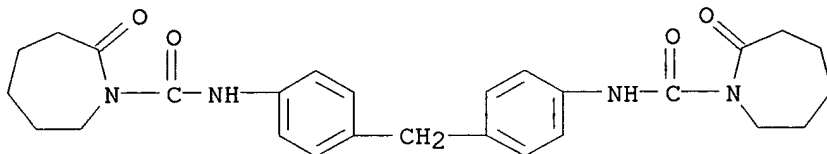
L77 ANSWER 59 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1981:158411 CAPLUS
 DN 94:158411
 TI Synthesis of blocked MDI adducts, their DSC evaluation and effect of pigmentation
 AU Anagnostou, Taki; Jaul, Ernest
 CS Wyandotte Paint Prod. Co., Troy, MI, 48084, USA
 SO Journal of Coatings Technology (1981), 53(673), 35-45
 CODEN: JCTEDL; ISSN: 0361-8773
 DT Journal
 LA English
 AB When Carbowax 400 (I) [25322-68-3] was added to blocked 4,4'-diphenylmethane diisocyanate [101-68-8] adducts, i.e., adducts of Me Et ketoxime (II) [96-29-7], .epsilon.-caprolactam (III) [105-60-2], and benzotriazole (IV) [95-14-7], the adducts unblocked at lower temps. than in the absence of I. Several explanations for this phenomena were discussed. The addn. of pigment to the adduct-I mixts. had little effect on the II adduct, increased the III adduct unblocking reaction by .apprx.10.degree., and lowered the IV adduct unblocking reaction by .apprx.20.degree.. The higher the unblocking temp. the more pronounced the effect of pigmentation, indicating that the effect of pigmentation did not have a catalytic effect.
 IT **54112-23-1**
 RL: USES (Uses)
 (unblocking of, effect of polyethylene glycol and pigments on)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same on #10



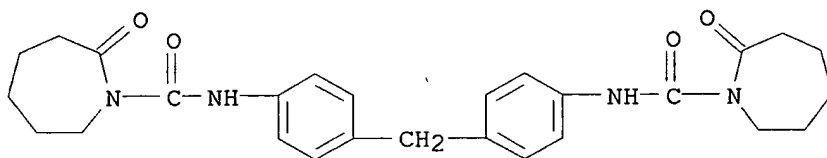
L77 ANSWER 60 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1981:66162 CAPLUS
 DN 94:66162
 TI Effect of hydrogen bonds on the activating capability of carbamoyl caprolactams in the anionic polymerization of caprolactam
 AU Frolov, V. G.; Pshenitsyna, V. P.; Krasnova, I. A.
 CS Nauchno-Proizvod. Ob'edin. "Plastmassy", Moscow, USSR
 SO Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1980), 22(10), 758-60
 CODEN: VYSBAI; ISSN: 0507-5483
 DT Journal
 LA Russian
 AB The higher activating ability of the aliph. carbamoylcaprolactam (CCL) hexamethylenebis(carbamoylcaprolactam) (I) [5888-87-9] in comparison to the arom. CCL diphenylmethanebis(carbamoylcaprolactam) (II) [54112-23-1] during the anionic polymn. of caprolactam [105-60-2] is caused by the different conformation (of the NH group relative to carbamoyl CO group) of I and II and the formation of different types of H bonds. Intramol. H bonds are formed between the NH group and the lactam CO group in I, leading to a weakening of the heterocyclic C-N bond and facilitating nucleophilic attack and ring opening. Both intra- and intermol. H bonds are formed in II.
 IT **54112-23-1**
 RL: USES (Uses)
 (activating ability of, in anionic polymn. of caprolactam, conformation and hydrogen bonding in relation to)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as #10



L77 ANSWER 61 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1980:532858 CAPLUS
 DN 93:132858
 TI Kinetic studies of anionic polymerization of caprolactam in the presence of carbamoylcaprolactams
 AU Malkin, A. Ya.; Frolov, V. G.; Ivanova, A. N.; Andrianova, Z. S.; Alekseichenko, L. A.
 CS Inst. Khim. Fiz., Chernogolovka, USSR
 SO Vysokomolekulyarnye Soedineniya, Seriya A (1980), 22(5), 995-1000
 CODEN: VYSAAF; ISSN: 0507-5475
 DT Journal
 LA Russian
 AB Activity of the title activators, obtained by reaction of various isocyanates with .epsilon.-caprolactam (I) [105-60-2], was evaluated by detn. of kinetics of anionic polymn. of I using a thermometric method. Increasing electronegativity of the substituent of the carbamoyl group of the activators increased the polymn. rate up to a limiting value. A self acceleration was obsd. in the polymn. Kinetic consts. were obtained and equations were given relating kinetic consts. to the concn. of the catalyst and the activators.
 IT **54112-23-1**
 RL: CAT (Catalyst use); USES (Uses)
 (catalysts, for polymn. of caprolactam, activity of)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as #10



L77 ANSWER 62 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1980:78011 CAPLUS

DN 92:78011

TI Process for preparing polyester fiber composite materials useful for reinforcing rubber articles

IN Takata, Tadahiko; Kamiyoshi, Masaya; Tanaka, Satoshi

PA Teijin Ltd., Japan

SO Brit. UK Pat. Appl., 18 pp.

CODEN: BAXXDU

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2009806	A	19790620	GB 1978-43487	19781107
	GB 2009806	B2	19820415		
	JP 54073994	A2	19790613	JP 1977-136233	19771115
	JP 60024226	B4	19850612		
	JP 54082492	A2	19790630	JP 1977-148120	19771212
	JP 57021587	B4	19820508		
	AU 7841428	A1	19790524	AU 1978-41428	19781108
	AU 527025	B2	19830210		
	US 4248938	A	19810203	US 1978-958739	19781108
PRAI	JP 1977-136233		19771115		
	JP 1977-148120		19771212		

AB The title process comprises impregnating a polyester fiber material with a polyepoxide, a blocked polyisocyanate, and a rubber latex, drying and heat-treating the material at .gtoreq.180.degree., impregnating the treated material with a formaldehyde-resorcinol polymer [24969-11-7], a rubber latex, and, optionally, an ethylene urea deriv. I (Z = aliph. or arom. hydrocarbon residue; n = 1-3) drying, and heat-treating at .gtoreq.120.degree. to give a composite material of excellent bonding properties to rubber, good softness, and high fatigue-resistance. Thus, 6 g Denacol EX 611 [72557-94-9] was uniformly mixed with 4 g 30% aq. Na dioctyl sulfosuccinate and the mixt. was dissolved in 805 g H₂O. Hylene MP [101-65-5] 14, 30% aq. Na dioctyl sulfosuccinate 4, and H₂O 42 g were ball-milled 24 h, mixed with the Denacol EX 611 soln. and 125 g aq. emulsion of butadiene-styrene-vinylpyridine polymer (II) [9019-71-0] to form the first treatment liq. Resorcinol 29, 37% aq. HCHO 29, 28% aq. NH₃ 31, and H₂O 500 g were mixed 3 h at 25.degree. to form a resorcinol-formaldehyde polymer soln. to which was added 418 g 40% aq. dispersion II and the mixt. aged 48 h at 25.degree. to give a second treatment liq. A poly(ethylene terephthalate) fiber cord was continuously impregnated with the first treatment liq., dried 2 min at 150.degree., and heated 1 min at 230.degree. to give a treated cord contg. 2.2% of the first treatment agents. The impregnated cord was then similarly treated with the second treatment liq. to give a 2.9% uptake of second treatment agents on the cord.

IT 54112-23-1

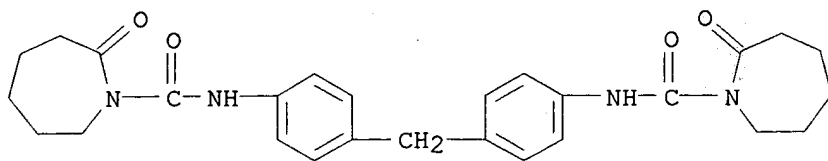
RL: USES (Uses)

(adhesives, for bonding polyester fiber reinforcement to rubbers)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Samman
#10



L77 ANSWER 63 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1979:441132 CAPLUS
 DN 91:41132
 TI Manufacture of fiberboards
 IN Hashimoto, Kenjiro; Okada, Masanobu; Yokota, Nobuo; Tanaka, Kenzo
 PA Mitsuboshi Belting Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

Same as #10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54040858	A2	19790331	JP 1977-108083	19770907
PRAI	JP 1977-108083		19770907		

AB Cellulosic fibers in aq. dispersions were treated with 3-30% blocked polyisocyanate, formed to a sheet, and pressed at a temp. higher than the deblocking temp. of the blocked polyisocyanates to give high-strength fiberboards with low moisture adsorption. For example, a dispersion was prepd. from caprolactam-CH₂(C₆H₄NCO-p)₂ adduct (2:1) [54112-23-1] 100, cationic surfactant 3, nonionic surfactant 1, 5% aq. poly(vinyl alc.) 35, and water 191.5 parts. Waste corrugated board 100, the above dispersion 17, and water 3386 parts was beaten, treated with 15 g 17% alum to pH 4.5, formed to a sheet, dewatered, and pressed at 220.degree. to give a board with moisture regain (at 25.degree.) 3.1%, water absorption 28.6%, bending strength 453 kg/cm², and tensile strength 198 kg/cm², compared with 5.2, 55.3, 320, and 160, resp., in the absence of blocked isocyanate.

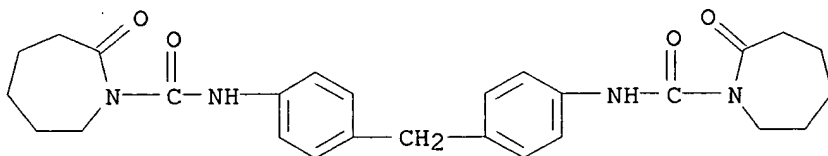
IT **54112-23-1**

RL: USES (Uses)

(in fiberboard manuf., for water resistance and strength)

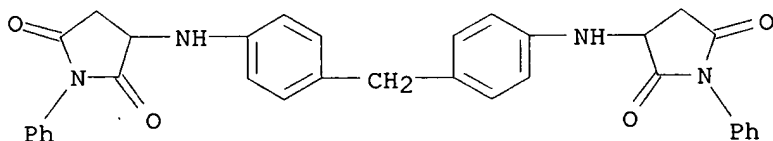
RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

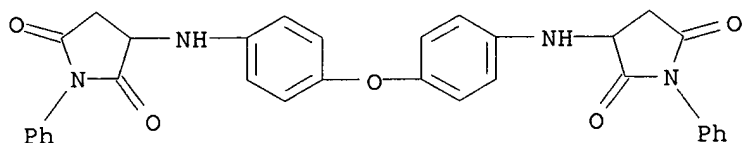


L77 ANSWER 64 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1979:439914 CAPLUS
 DN 91:39914
 TI Polydisuccinimides. Polyaddition reactions of aliphatic and aromatic diamines to N,N'-bismaleimide
 AU Gherasim, M. G.; Zugravescu, I.
 CS Inst. Macromol. Chem. "P. Poni", Iasi, Rom.
 SO European Polymer Journal (1978), 14(12), 985-90
 CODEN: EUPJAG; ISSN: 0014-3057
 DT Journal
 LA English
 AB The addn. reactions of N,N'-bismaleimide (I) [6903-84-0] with aliph. and arom. amines and diamines were investigated together with those of the model compd. N-phenylmaleimide [941-69-5]. The mechanism of the addn. reaction is ionic in polar solvents and homolytic in nonpolar solvents. Arom. amines were less reactive than the aliph. amines, which caused an opening of the imide ring structure. The reaction of 11 arom. and 3 aliph. diamines with I gave polymers II (Z = e.g. C₆H₄, biphenyl) and [-COCH:CHCONHNHCOCH:CHCONH(CH₂)_pNH]_m (p = 2, 4, 6), resp. The polymers were characterized by IR spectra, viscosity, and thermal anal. methods.
 IT **70689-30-4P 70689-32-6P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 70689-30-4 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-phenyl- (9CI) (CA INDEX NAME)

Same as #10



RN 70689-32-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[oxybis(4,1-phenyleneimino)]bis[1-phenyl- (9CI)
 (CA INDEX NAME)



L77 ANSWER 65 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1979:6902 CAPLUS
 DN 90:6902
 TI Piperidine derivatives useful as polymer stabilizers
 PA Sankyo Co., Ltd., Japan
 SO Neth. Appl., 177 pp.
 CODEN: NAXXAN
 DT Patent
 LA Dutch
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7800505	A	19780718	NL 1978-505	19780116
	JP 53101380	A2	19780904	JP 1977-3285	19770114
	JP 62042898	B4	19870910		
	FR 2377381	A1	19780811	FR 1978-999	19780113
	FR 2377381	B1	19820108		
	BE 862958	A1	19780717	BE 1978-184368	19780116
	GB 1574999	A	19800917	GB 1978-1715	19780116
	US 4371644	A	19830201	US 1980-168271	19800710
PRAI	JP 1977-3285		19770114		
	US 1978-866957		19780105		

AB Compds. contg. 2 or 3 substituted or unsubstituted 2,2,6,6-tetramethylpiperidiny groups attached to a central radical by groups contg. ether moieties and preferably OH groups are useful as polymer stabilizers and have improved evapn., extn., and heat resistance. Thus, a mixt. of 5.1 g 4-(N-butylacetamido)-2,2,6,6-tetramethylpiperidine [67778-07-8] and 3.5 g 2,2-bis[4-(2,3-epoxypropoxy)cyclohexyl]propane [13410-58-7] was heated 5 h at 200-10.degree., giving 2,2-bis[4-[3-[4-(N-butylacetamido)-2,2,6,6-tetramethylpiperidino]-2-hydroxypropoxy]cyclohexyl]propane (I) [67812-46-8]. A mixt. of polypropylene [9003-07-0] 100, stearyl 2-(4-hydroxy-3,5-di-tert-butylphenyl)propionate 0.2, and I 0.25 part was processed into a 0.1 mm sheet by std. methods and exposed to light in an accelerated testing app. This compn. had time to 50% loss of elongation 6.6 times that of a control without I, compared to 2.0 times for a com. stabilizer, Tinuvin 327.

IT 67777-70-2 67777-71-3 67777-72-4
 67777-73-5 67777-74-6 67777-75-7
 67777-76-8 67777-89-3 67777-95-1
 67777-96-2 67778-13-6 67778-14-7
 67812-49-1 67913-12-6 68406-84-8

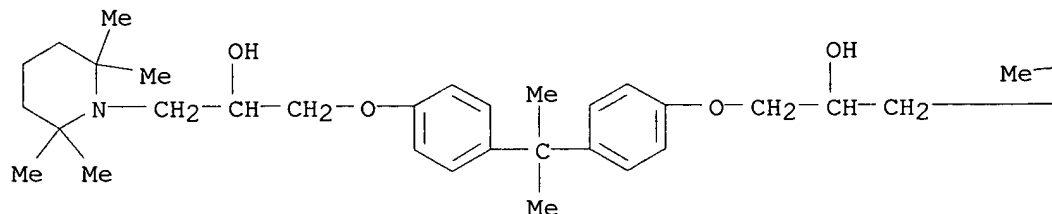
RL: USES (Uses)

(light stabilizers, for plastics)

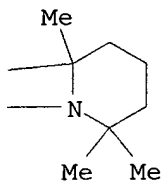
RN 67777-70-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



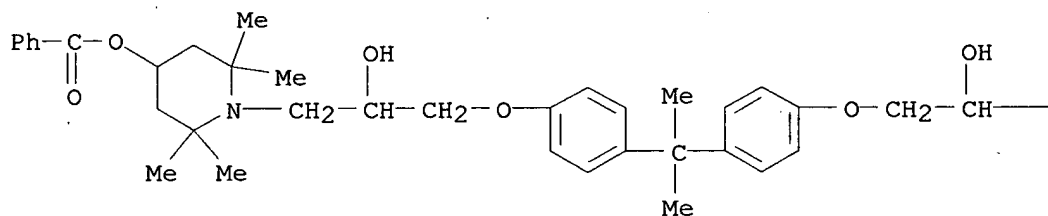
PAGE 1-B



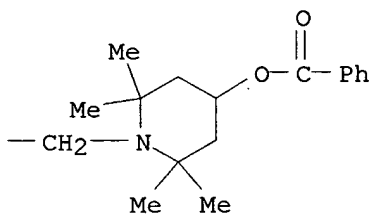
RN 67777-71-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



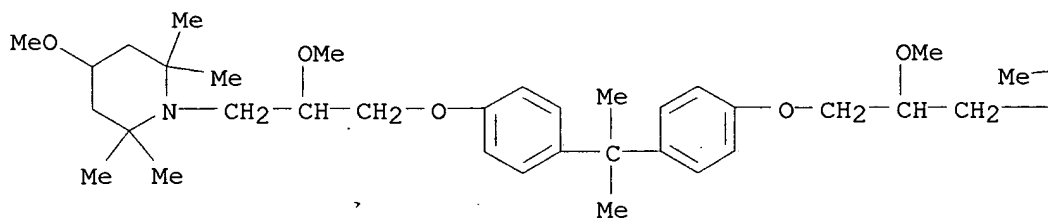
PAGE 1-B



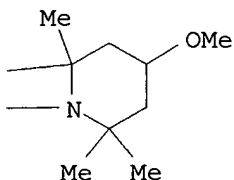
RN 67777-72-4 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-methoxy-3,1-propanediyl)]]bis[4-methoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



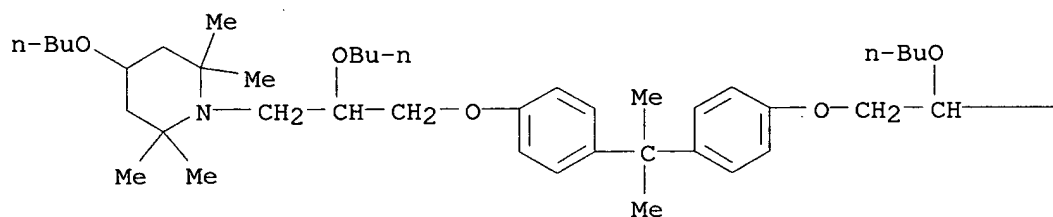
PAGE 1-B



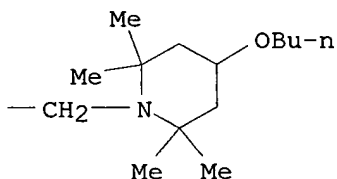
RN 67777-73-5 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-butoxy-3,1-propanediyl)]]bis[4-butoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



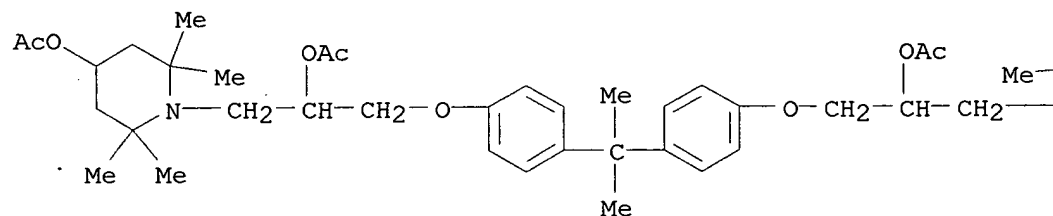
PAGE 1-B



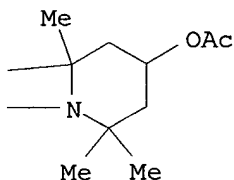
RN 67777-74-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(acetyloxy)-2,2,6,6-tetramethyl-, diacetate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



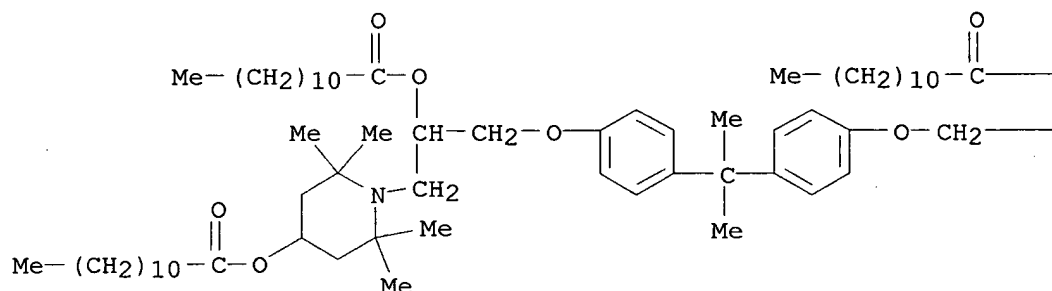
PAGE 1-B



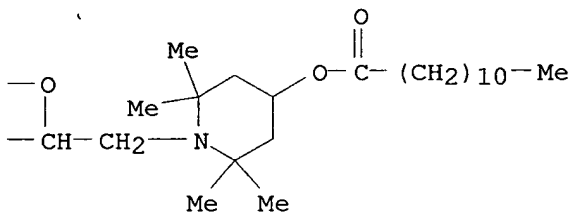
RN 67777-75-7 CAPLUS

CN Dodecanoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[2-[(1-oxododecyl)oxy]-3,1-propanediyl]] (2,2,6,6-tetramethyl-1,4-piperidinediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



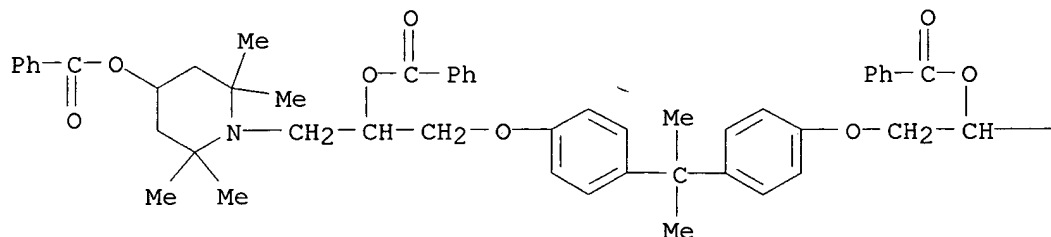
PAGE 1-B



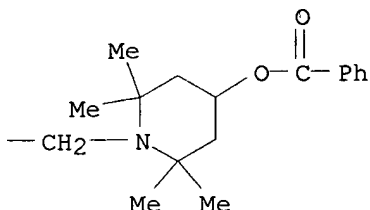
RN 67777-76-8 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl-, dibenzoate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



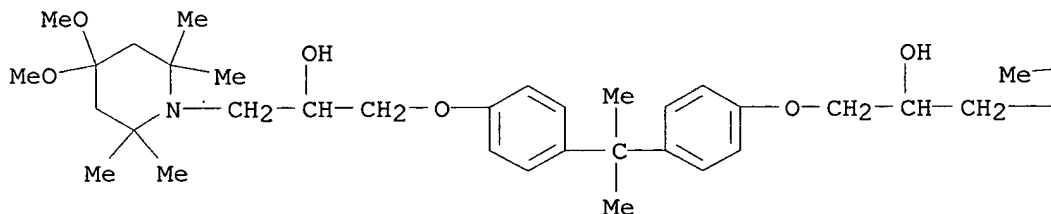
PAGE 1-B



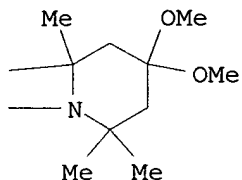
RN 67777-89-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4,4-dimethoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



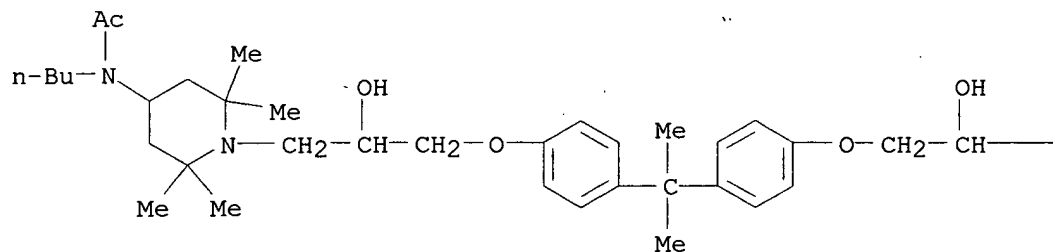
PAGE 1-B



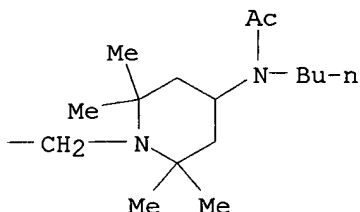
RN 67777-95-1 CAPLUS

CN Acetamide, N,N'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)(2,2,6,6-tetramethyl-1,4-piperidinediyl)]]bis[N-butyl- (9CI) (CA INDEX NAME)

PAGE 1-A



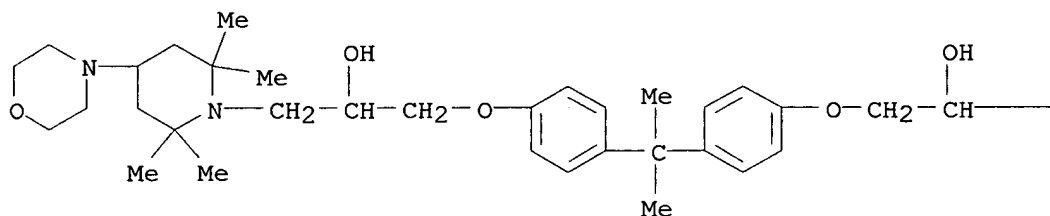
PAGE 1-B



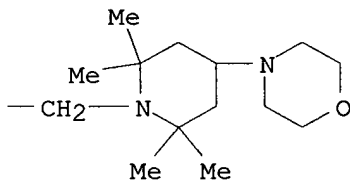
RN 67777-96-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-(4-morpholinyl)- (9CI)
(CA INDEX NAME)

PAGE 1-A



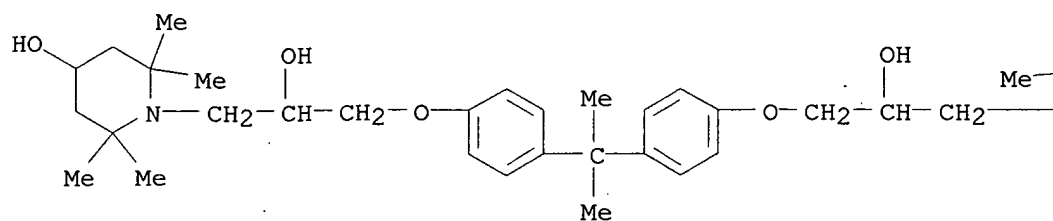
PAGE 1-B



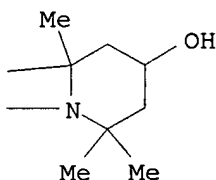
RN 67778-13-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-hydroxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



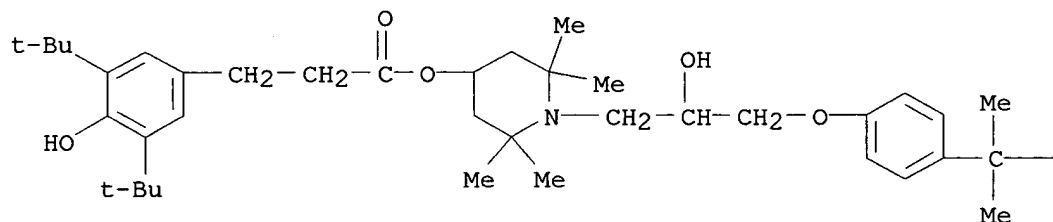
PAGE 1-B



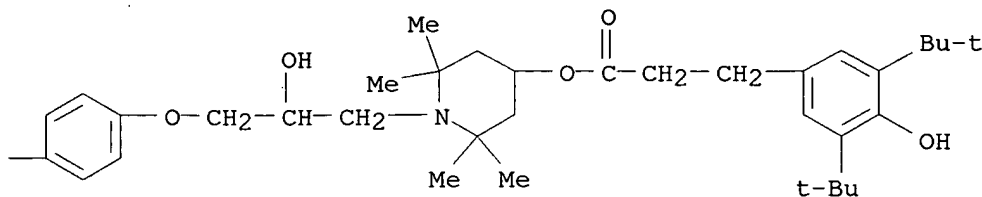
RN 67778-14-7 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-
 propanediyl)(2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA
 INDEX NAME)

PAGE 1-A



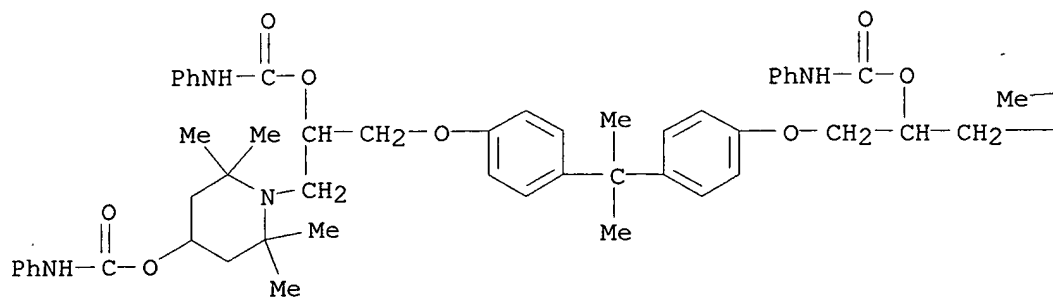
PAGE 1-B



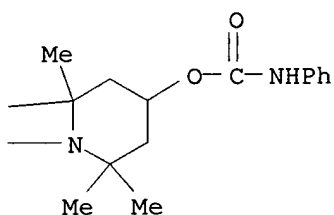
RN 67812-49-1 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-
 phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-
 [[(phenylamino)carbonyl]oxy]-, bis(phenylcarbamate) (ester) (9CI) (CA
 INDEX NAME)

PAGE 1-A



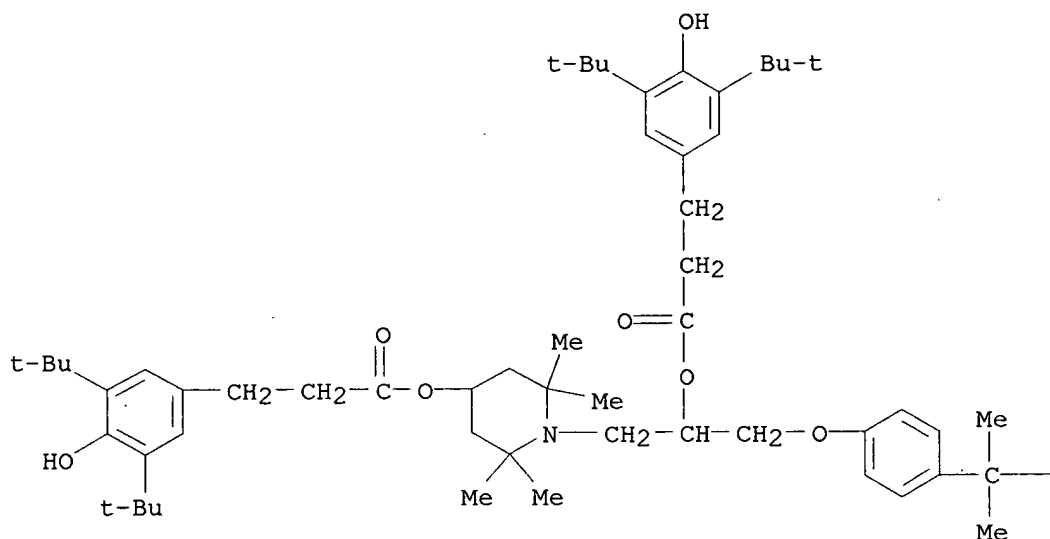
PAGE 1-B



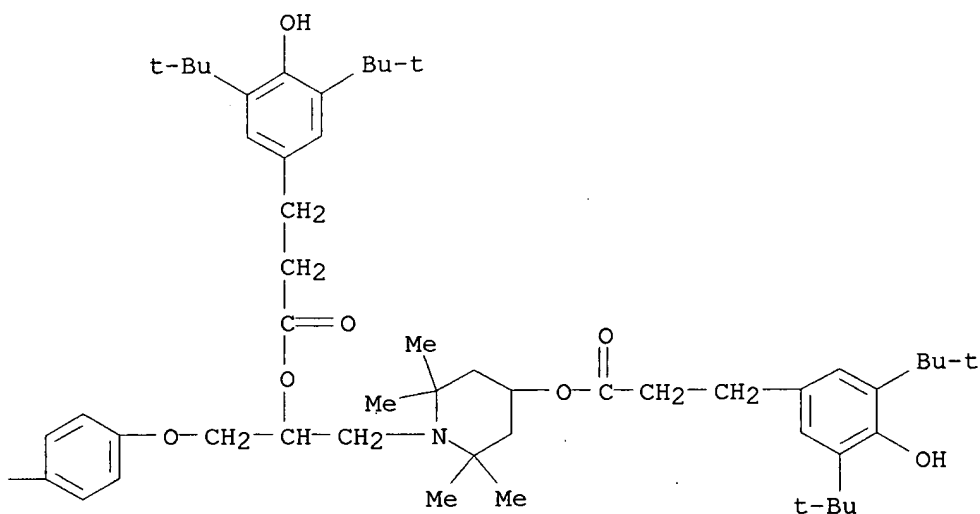
RN 67913-12-6 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 (1-methylethylidene)bis[4,1-phenyleneoxy[2-[3-[3,5-bis(1,1-dimethylethyl)-
 4-hydroxyphenyl]-1-oxopropoxy]-3,1-propanediyl](2,2,6,6-tetramethyl-1,4-
 piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



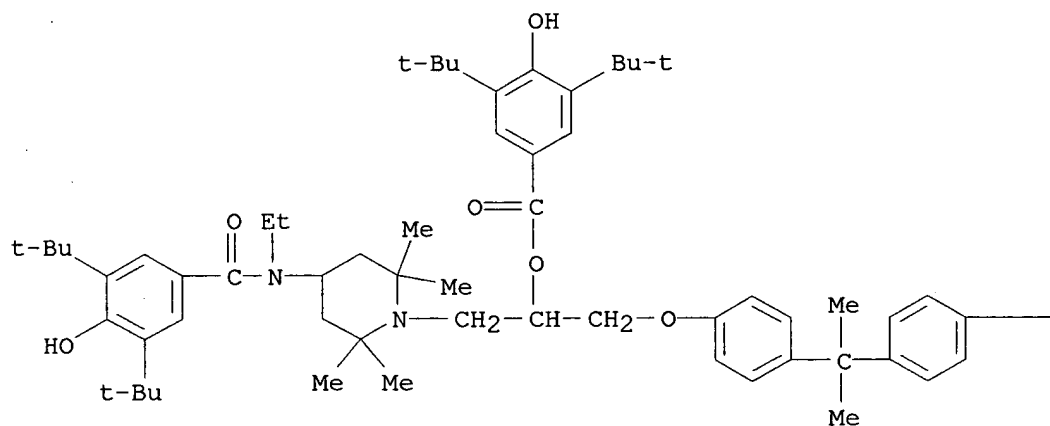
PAGE 1-B

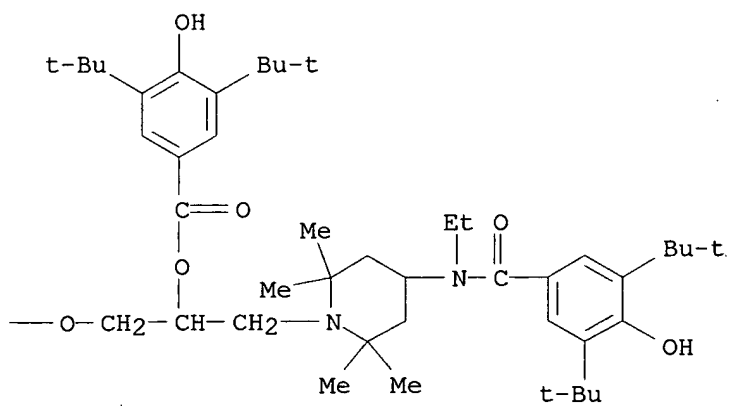


RN 68406-84-8 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, (1-methylethylidene)bis[4,1-phenyleneoxy[1-[[4-[[3,5-bis(1,1-dimethylethyl)-4-hydroxybenzoyl]ethylamino]-2,2,6,6-tetramethyl-1-piperidinyl]methyl]-2,1-ethanediyloxy]] ester (9CI) (CA INDEX NAME)

PAGE 1-A





L77 ANSWER 66 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1978:598892 CAPLUS

DN 89:198892

TI Self-crosslinkable polyurethanes

IN Winkelmann, Hans Dieter; Wolf, Karl Heinz; Oertel, Harald; Weimann, Norbert

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 53 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2707659	A1	19780824	DE 1977-2707659	19770223
	US 4153775	A	19790508	US 1978-879504	19780221
	JP 53105599	A2	19780913	JP 1978-18646	19780222
	GB 1597989	A	19810916	GB 1978-7034	19780222
	NL 7802036	A	19780825	NL 1978-2036	19780223
PRAI	DE 1977-2707659		19770223		

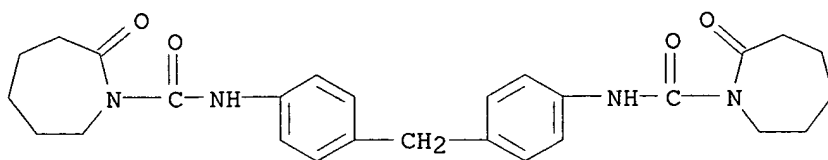
AB Urethane I [68125-44-0] and similar diols contg. caprolactam (II) [105-60-2]-blocked isocyanate groups were prep. for use in the manuf. of self-crosslinking polyurethane elastomers. Thus, an adduct of 2 mol II and 1 mol bis(4-isocyanatophenyl)methane (III) [101-68-8] was treated with H₂NN(CH₂CHMeOH)₂ [62723-38-0] to prep. I. Adipic acid-1,6-hexanediol-neopentyl glycol copolymer (mol. wt. 1875) 500, MeN(CH₂CHMeOH)₂ 10.68, I 37.2, and III 163.3 parts were used to prep. a prepolymer which was treated with ethylenediamine and diisocyanatohexane to prep. a crosslinkable copolymer [68125-45-1]. A film prep. from the copolymer and heated at 130.degree. for 30 min was insol. in DMF at 80.degree..

IT **54112-23-1**

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with amino alcs.)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 67 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1978:598891 CAPLUS

DN 89:198891

TI Isocyanate adduct diols

IN Winkelmann, Hans Dieter; Wolf, Karl Heinz; Oertel, Harald; Weimann, Norbert

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 50 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2707660	A1	19780824	DE 1977-2707660	19770223
	DE 2707660	C2	19851219		
	US 4211699	A	19800708	US 1978-879740	19780221
	JP 53105428	A2	19780913	JP 1978-18647	19780222
	JP 60053017	B4	19851122		
PRAI	DE 1977-2707660		19770223		

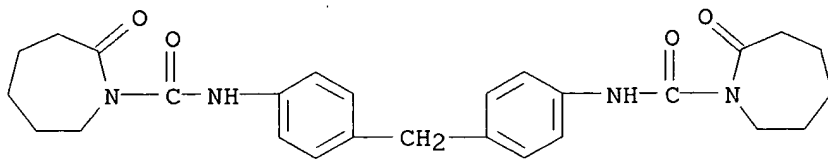
AB I [68125-44-0], II [68125-48-4], and 3 similar diols were prepd. and used for the manuf. of self-crosslinking polyurethane elastomers. Thus, an adduct of 2 mol caprolactam [105-60-2] and 1 mol bis(4-isocyanatophenyl)methane (III) [101-68-8] was treated with H₂NN(CH₂CHMeOH)₂ [62723-38-0] to prep. I. I 37.2, adipic acid-neopentyl glycol-1,6-hexanediol copolymer (mol. wt. 1875) 500, MeN(CH₂CHMeOH)₂ 10.68, and III 163.3 parts were used to prep. a prepolymer which was treated with ethylenediamine and OCN(CH₂)₆NCO to prep. a polyurethane [68125-45-1]. A film prepd. from the polyurethane and heated at 130.degree. for 30 min was insol. in DMF at 80.degree..

IT 54112-23-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dialkanolamines)

RN 54112-23-1 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



Samman
#10

L77 ANSWER 68 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1978:580832 CAPLUS
 DN 89:180832
 TI Piperidine derivatives useful as stabilizers for polymers
 IN Soma, Nobuo; Morimura, Syoji; Yoshioka, Takao; Kurumada, Tomoyuki
 PA Sankyo Co., Ltd., Japan
 SO Ger. Offen., 192 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 2

*Same as
65
#*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2801470	A1	19780727	DE 1978-2801470	19780113
	JP 53101380	A2	19780904	JP 1977-3285	19770114
	JP 62042898	B4	19870910		
	FR 2377381	A1	19780811	FR 1978-999	19780113
	FR 2377381	B1	19820108		
	BE 862958	A1	19780717	BE 1978-184368	19780116
	GB 1574999	A	19800917	GB 1978-1715	19780116
	US 4371644	A	19830201	US 1980-168271	19800710
PRAI	JP 1977-3285		19770114		
	US 1978-866957		19780105		

AB 2,2-Bis[4-[2-hydroxy-3-(2,2,6,6-tetramethylpiperidino)propoxy]phenyl]propane (I, R = H) [6777-70-2], I (R = OH) [6778-13-6], I [R = 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionyloxy] [6778-14-7], tris[2-hydroxy-3-(2,2,6,6-tetramethylpiperidino)propyl] isocyanurate [67901-20-6], bis[2-hydroxy-3-(4-hydroxy-2,2,6,6-tetramethylpiperidino)propyl] 1,2-cyclohexanedicarboxylate [6777-81-5], bis[3-(4-benzoyloxy-2,2,6,6-tetramethylpiperidino)-2-hydroxypropyl] sebacate [6777-79-1], 1,3-bis[3-(4-benzoyloxy-2,2,6,6-tetramethylpiperidino)-2-hydroxypropoxy]-2-hydroxypropane [6777-84-8], 2,2-bis[4-[2-hydroxy-3-(7,7,9,9-tetramethyl-1,4-dioxo-8-azaspiro[4.5]dec-8-yl)propoxy]cyclohexyl]propane (II) [6777-93-9], 2,2-bis[4-[2-hydroxy-3-(7,7,9,9-tetramethyl-3-octyl-2,4-dioxo-1,3,8-triazaspiro[4.5]dec-8-yl)propoxy]cyclohexyl]propane [6778-00-1], and 38 similar compds. are prepd. for use as stabilizers for plastics. The stabilizers are resistant to volatilization and extn. from plastics. Thus, 2,2,6,6-tetramethylpiperidine [768-66-1] and 2,2-bis[4-(2,3-epoxypropoxy)phenyl]propane [1675-54-3] were used to prep. I (R = H). The addn. of 0.25% I (R = H) and 0.2% phenolic antioxidant to polypropylene [9003-07-0] increased the UV light resistance by a factor of 4.7.

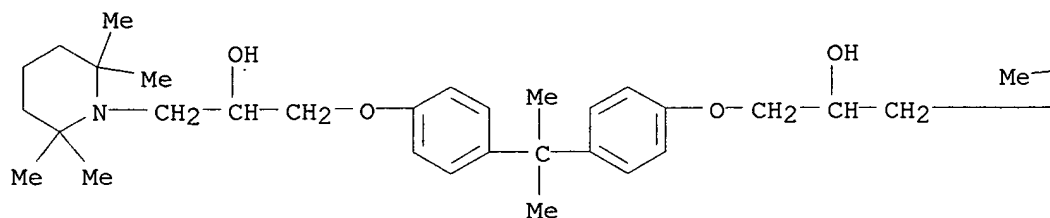
IT 6777-70-2P 6777-71-3P 6777-72-4P
 6777-73-5P 6777-74-6P 6777-75-7P
 6777-76-8P 6777-95-1P 6777-96-2P
 6778-13-6P 6778-14-7P 67812-49-1P
 67913-12-6P

RL: PREP (Preparation)
 (manuf. of, as stabilizers for plastics)

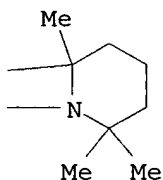
RN 6777-70-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



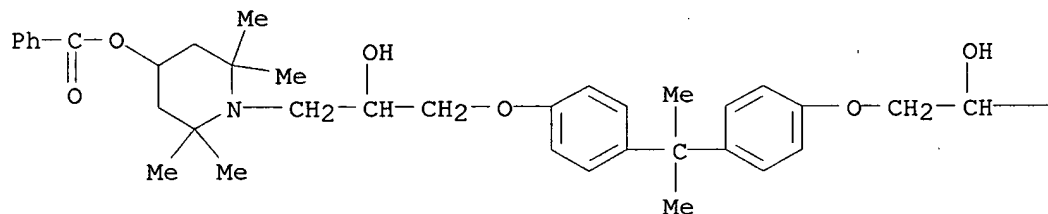
PAGE 1-B



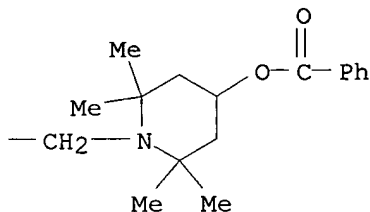
RN 67777-71-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



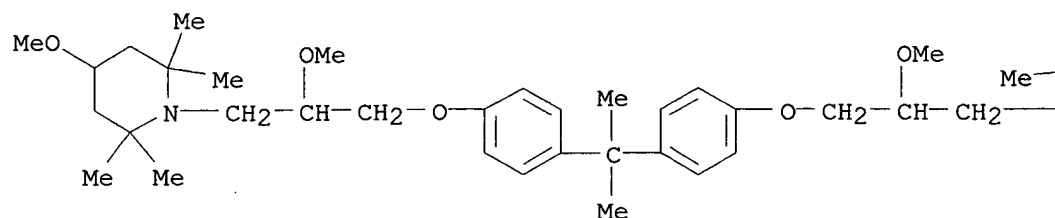
PAGE 1-B



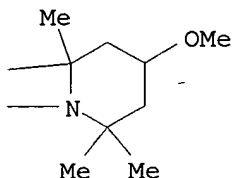
RN 67777-72-4 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-methoxy-3,1-propanediyl)]]bis[4-methoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



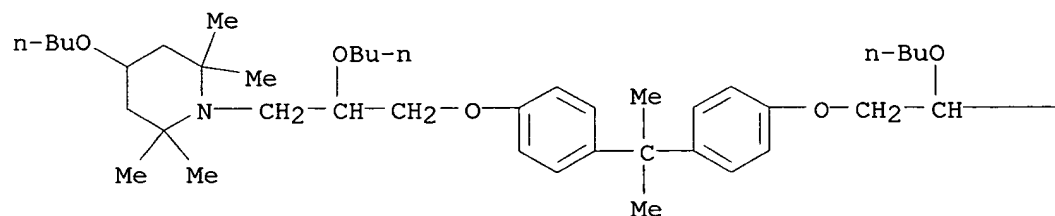
PAGE 1-B



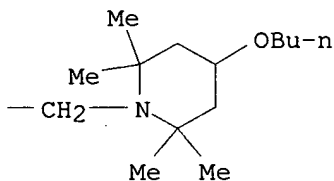
RN 67777-73-5 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-butoxy-3,1-propanediyl)]]bis[4-butoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



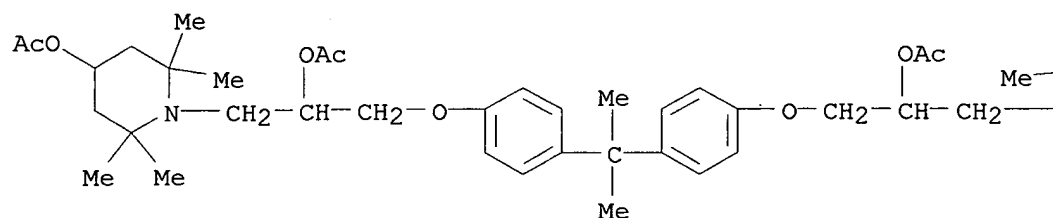
PAGE 1-B



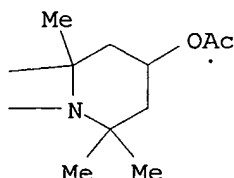
RN 67777-74-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(acetyloxy)-2,2,6,6-tetramethyl-, diacetate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



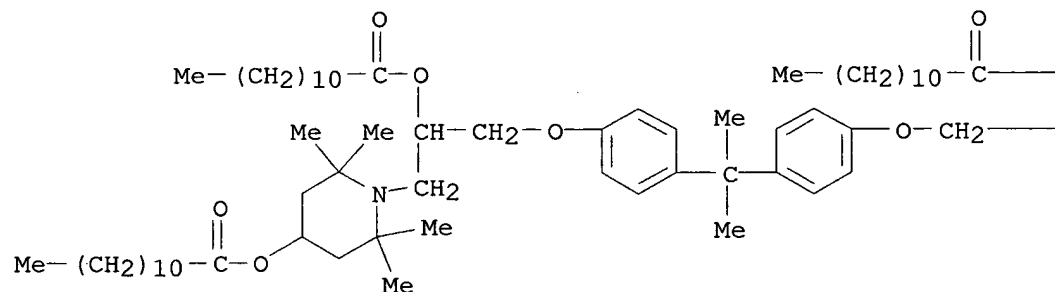
PAGE 1-B



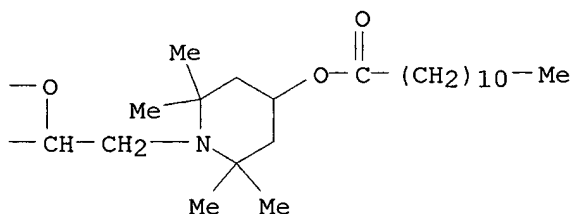
RN 67777-75-7 CAPLUS

CN Dodecanoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[2-[(1-oxododecyl)oxy]-3,1-propanediyl](2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

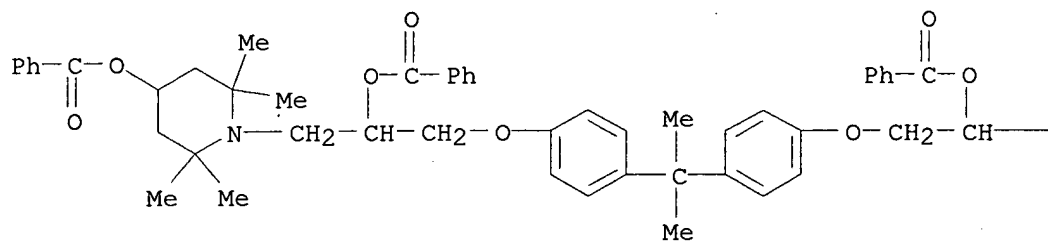


RN 67777-76-8 CAPLUS

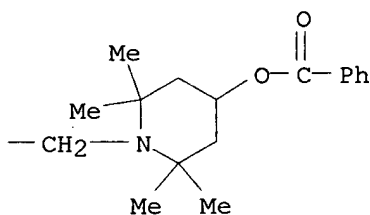
CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl-, dibenzoate

(ester) (9CI) (CA INDEX NAME)

PAGE 1-A



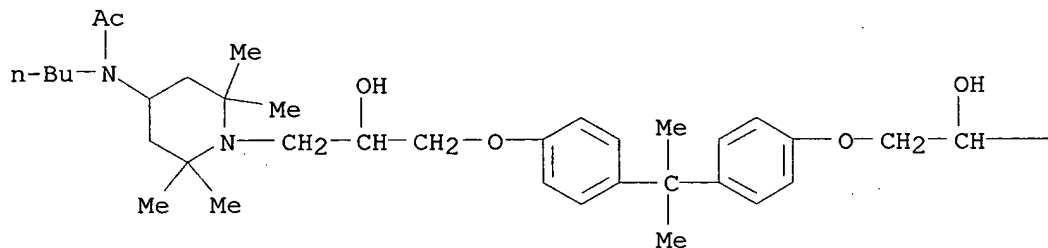
PAGE 1-B



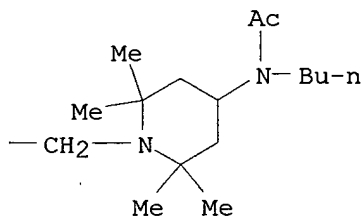
RN 67777-95-1 CAPLUS

CN Acetamide, N,N'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)(2,2,6,6-tetramethyl-1,4-piperidinediyl)]]bis[N-butyl- (9CI)
(CA INDEX NAME)

PAGE 1-A



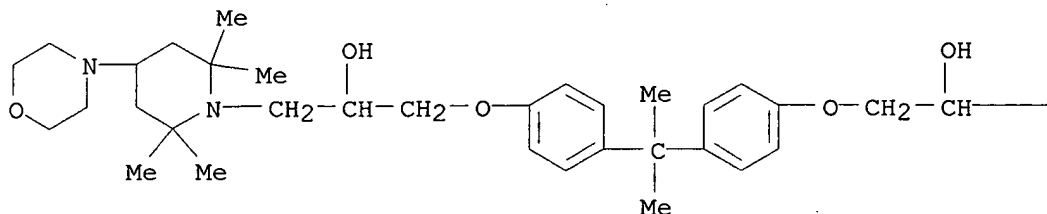
PAGE 1-B



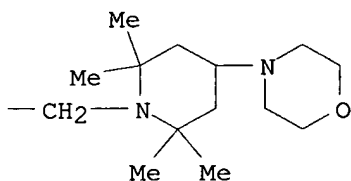
RN 67777-96-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-(4-morpholinyl)- (9CI)
(CA INDEX NAME)

PAGE 1-A



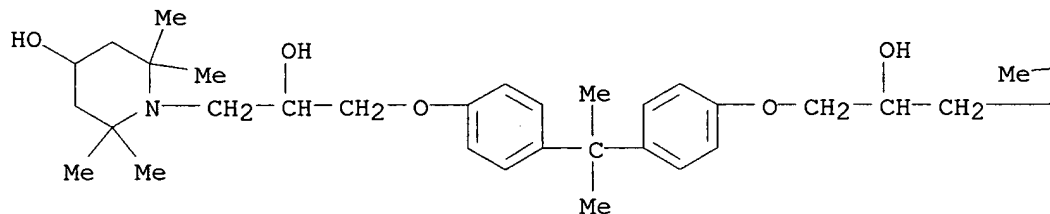
PAGE 1-B



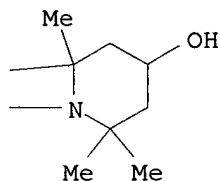
RN 67778-13-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-hydroxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 67778-14-7 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-

CC(C)(C)c1cc(C(C)(C)C)c(O)cc1CCOC(=O)O[C@H]1CC[C@@H](C)[C@H](C)N1CC[C@H](O)COc2ccc(C(C)(C)C)cc2CC(C)(C)N(CCOC(=O)CCc1cc(O)c(C(C)(C)C)c1)CC(O)COc2ccc(*)cc2

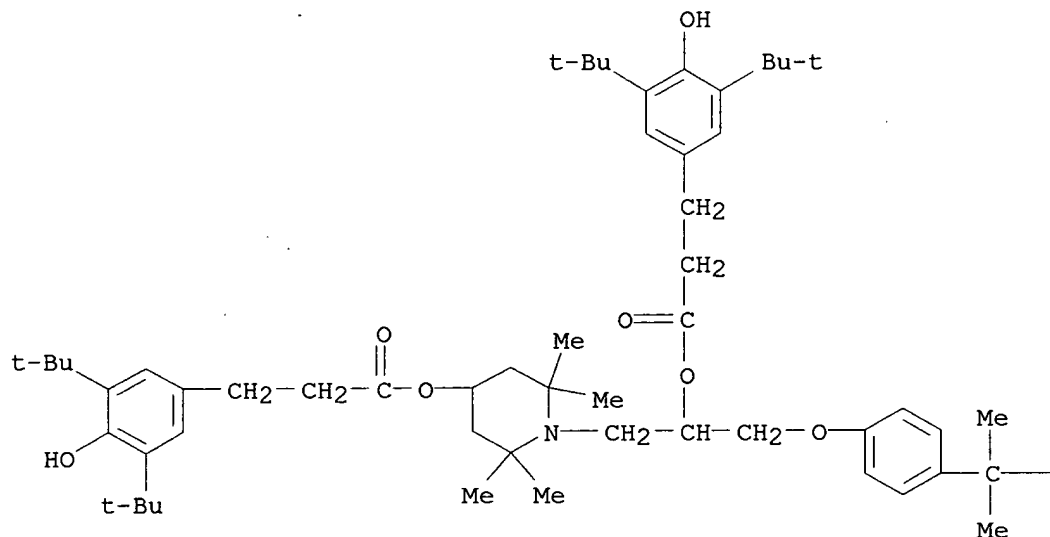
RN	67812-49-1	CAPLUS
CN	1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-[[(phenylamino)carbonyl]oxy]-, bis(phenylcarbamate) (ester) (9CI) (CA INDEX NAME)	

CN1(C)CC(C(=O)Nc2ccccc2)CC1(C)COC(=O)Nc3ccccc3CN1CCC(C)(C)C1C(=O)Nc2ccccc2

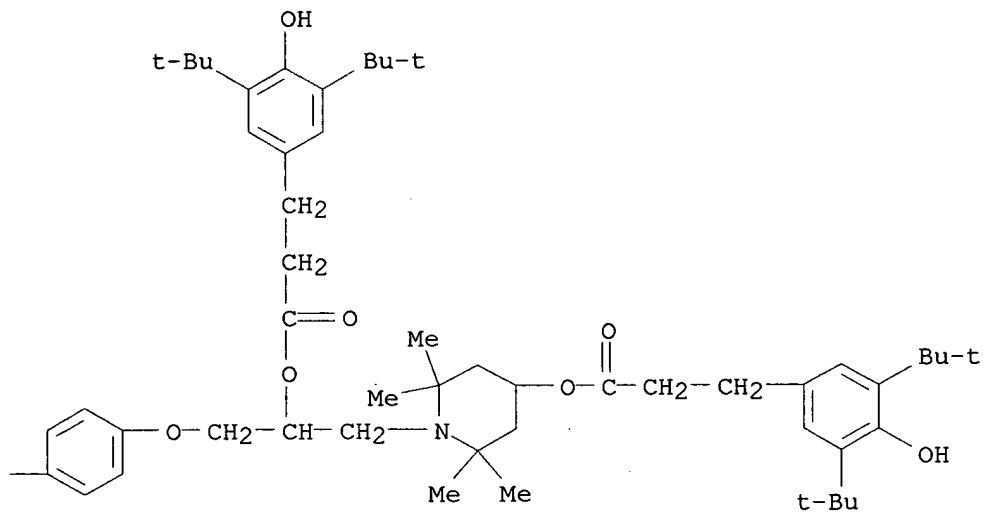
RN 67913-12-6 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 (1-methylethylidene)bis[4,1-phenyleneoxy[2-[3-[3,5-bis(1,1-dimethylethyl)-
 4-hydroxyphenyl]-1-oxopropoxy]-3,1-propanediyl] (2,2,6,6-tetramethyl-1,4-
 piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 67777-89-3

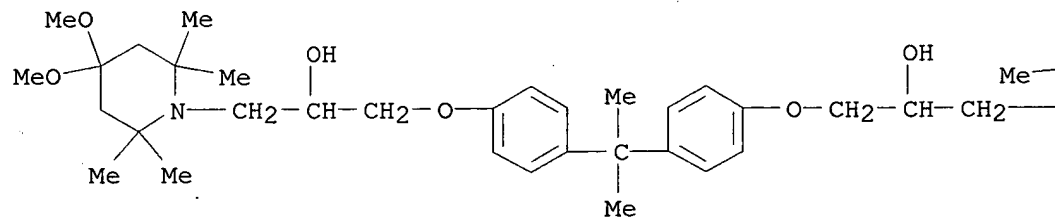
RL: USES (Uses)

(stabilizers, for plastics)

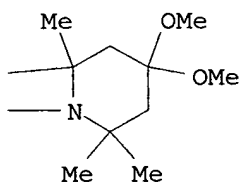
RN 67777-89-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4,4-dimethoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 69 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1978:510472 CAPLUS

DN 89:110472

TI The reaction of phenols with N-substituted maleimides

AU Renner, Alfred; Forgo, Imre; Hofmann, Walter; Ramsteiner, Klaus

CS Div. Kunstst. Addit., Ciba-Geigy A.-G., Basel, Switz.

SO Helvetica Chimica Acta (1978), 61(4), 1443-53

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

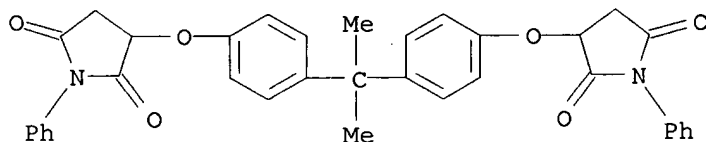
AB Phenoxysuccinimides I (R = H, alkyl, EtO₂C, Cl, R₁ = Ph, cyclohexyl, hexyl) were prepd. from the corresponding p-RC₆H₄OH and maleimides in the presence of basic catalysts, with yields of .ltoreq.90% being obtained in the presence of tertiary alkylamines. Adducts of bisphenols with maleimides and of phenols with bismaleimides were also prepd. The purified phenoxysuccinimides were stable, but the presence of the basic catalyst caused their decompn. into the phenol and an oligomeric maleimide. A resinous polymer, prepd. from 1 mol bisphenol A and 2 mol 4,4'-bis(maleimido)diphenylmethane, was cast into a sheet and cured 14 h at 190.degree. and 4 h at 220.degree., giving a cured product with bending strength 135 N/mm², impact bending strength 0.7 N-cm/mm², heat distortion temp. 274.degree., water absorption at room temp. 0.82%, sp. elec. resistance 4.2 .times. 10¹⁶ .OMEGA.-cm, dielec. const. 3.6, and excellent retention of phys. properties on heat aging at 270.degree..

IT **67354-88-5P**

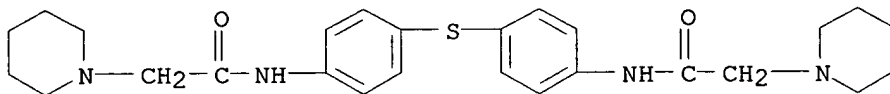
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 67354-88-5 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-phenyl- (9CI) (CA INDEX NAME)

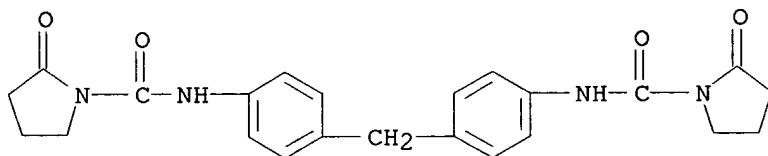


L77 ANSWER 70 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1978:423875 CAPLUS
 DN 89:23875
 TI Syntheses, spectroscopic and pharmacological properties of N-substituted derivatives of 4-(4-nitrophenylthio)benzenamine and 4,4'-thiobisaniline
 AU Valla, Alain; Petit, Louis; Davoust, Daniel; Molho, Darius
 CS Unite Toxicol. Exp., Hop. Fernand Widal, Paris, Fr.
 SO European Journal of Medicinal Chemistry (1978), 13(1), 93-6
 CODEN: EJMCA5; ISSN: 0223-5234
 DT Journal
 LA French
 AB 4-O₂NC₆H₄SC₆H₄NHCOCH₂R-4 and (4-RCH₂CONHC₆H₄)₂S (R = Cl, piperidino, morpholino) were prepd. from 4-O₂NC₆H₄Br, ClCOCH₂Cl, amines and Na₂S. The pyrroles I (R₁ = NO₂, NH₂, 2,5-dimethylpyrrolidino) were similarly prepd. The compds. show antiinflammatory, central nervous system depressant, and antipyretic activity.
 IT **66603-25-6P**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (prepn. and pharmacol. activity of)
 RN 66603-25-6 CAPLUS
 CN 1-Piperidineacetamide, N,N'-(thiodi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



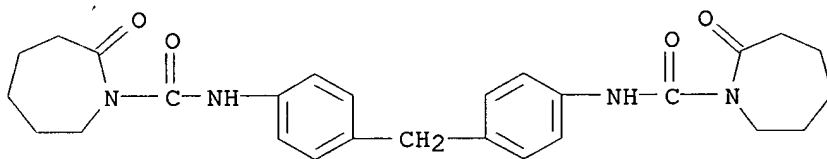
L77 ANSWER 71 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1978:137329 CAPLUS
 DN 88:137329
 TI New coupling concept for glass-reinforced nylon resin composites
 AU Johnson, Alan E.; Lunt, James M.
 CS Pilkington Brothers Ltd., Liverpool, UK
 SO Modern Plastics (1976), 53(7), 58-60, 63
 CODEN: MOPLAY; ISSN: 0026-8275
 DT Journal
 LA English
 AB The introduction of pendant trialkoxysilane groups along the polymer backbone of cationic polyurethanes contg. blocked isocyanate groups gives coupling sizes which are reactive with both glass fiber and nylon resin at compounding temps. of .apprx.250.degree.. Composites produced from glass fibers sized with these coupling agents have mech. properties superior to those made with conventional emulsion sizes, but strength retention after immersion in boiling water was poor.
 IT **66168-47-6**
 RL: PRP (Properties)
 (dissochn. temp. of)
 RN 66168-47-6 CAPLUS
 CN 1-Pyrrolidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis[2-oxo- (9CI)
 (CA INDEX NAME)

Same as #57

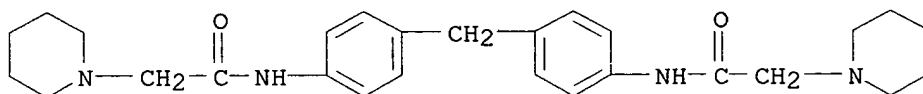


L77 ANSWER 72 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1978:90312 CAPLUS
 DN 88:90312
 TI Thermal stability of diisocyanates blocked by .epsilon.-caprolactam
 AU Vasil'ev, V. I.; Kuz'min, V. N.; Alyakrinskaya, A. I.
 CS USSR
 SO Plasticheskie Massy (1977), (9), 69-70
 CODEN: PLMSAI; ISSN: 0554-2901
 DT Journal
 LA Russian
 AB The thermal stability was detd. of 2,4-tolylene diisocyanate (I), mixts. of I and 2,6-tolylene diisocyanate (II) (80:20 and 65:35), and 4,4'-diphenylmethane diisocyanate [101-68-8] blocked with .epsilon.-caprolactam (III), 1,4-butanediol, and glycidol [556-52-5], as well as thermal stability of I-II mixt. (65:35) blocked with III in the presence of a series of catalysts (pyridine [110-86-1], dibutyllead dilaureate [15873-19-5], etc.). Thermal decompn. of the investigated compds. commenced in the range 105-30.degree., and it had max. intensity at 125-70.degree.. A I-II mixt. (65:35) blocked with III had the lowest thermal stability. The stability was detd. by measuring intensity of the IR absorption band of the NCO group during the heating.
 IT **54112-23-1**
 RL: PRP (Properties)
 (thermal stability of)
 RN 54112-23-1 CAPLUS
 CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)

Same as #10



L77 ANSWER 73 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1976:440644 CAPLUS
 DN 85:40644
 TI Synthetic low-molecular weight interferon inducers. Part 1. Derivatives of diaminofluoren-9-ones, diaminobenzophenones and diaminobiphenyls
 AU Meindl, P.; Bodo, G.; Tuppy, H.
 CS Ernst-Boehringer-Inst. Arzneimittelforsch., Bender und Co. G.m.b.H., Vienna, Austria
 SO Arzneimittel-Forschung (1976), 26(3), 312-16
 CODEN: ARZNAD; ISSN: 0004-4172
 DT Journal
 LA German
 AB 2,7-Bis[(diethylamino)acetylamino]fluoren-9-one (I) [59635-72-2] had oral interferon-inducing activity in mice at 50 or 250 mg/kg comparable to that of tilorone (II) [27591-97-5], and greater than that of 26 other fluorene, benzophenone, biphenyl, and diphenylmethane derivs. with acylamino side chains tested, most of which were inactive. The intact fluorene ring system was essential for activity. I was prepd. by reaction of 2,7-diaminofluoren-9-one [2915-84-6] with chloroacetic anhydride [541-88-8], and reaction of the resulting 2,7-bis(chloroacetylamino)fluoren-9-one [59635-65-3] with diethylamine [109-89-7].
 IT **59635-96-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and interferon-inducing activity of)
 RN 59635-96-0 CAPLUS
 CN 1-Piperidineacetamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 74 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1976:5991 CAPLUS

DN 84:5991

TI Stabilization of synthetic polymers

IN Murayama, Keisuke; Morimura, Syoji; Matsui, Katsuaki; Kurumada, Tomoyuki; Ohta, Noriyuki; Watanabe, Ichiro

PA Sankyo Co., Ltd., Japan

SO U.S., 15 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3904581	A	19750909	US 1973-399611	19730921
PRAI	US 1973-399611		19730921		

AB 4-Aminopiperidine derivs. acted as heat and light stabilizers for polymers. Thus, 1-benzyl-2,2,6,6-tetramethyl-4-piperidone [52981-86-9] reacted under H with BuNH₂ [109-73-9] to give 1-benzyl-4-butylamino-2,2,6,6-tetramethylpiperidine [52981-32-5] which stabilized Noblen JHHG (polypropylene) [9003-07-0] 680 hr against embrittlement at 45.degree. in a fade-meter under uv irradiation, whereas a control became brittle in 60 hr.

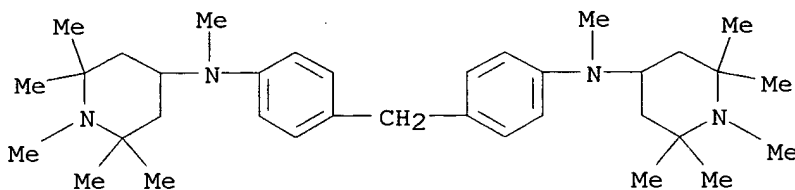
IT **52981-81-4**

RL: USES (Uses)

(heat- and light stabilizers for polymers)

RN 52981-81-4 CAPLUS

CN 4-Piperidinamine, N,N'-(methylenedi-4,1-phenylene)bis[N,1,2,2,6,6-hexamethyl- (9CI) (CA INDEX NAME)



L77 ANSWER 75 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1975:580809 CAPLUS

DN 83:180809

TI Thiuram accelerator systems using blocked isocyanates

IN Srail, Raymond C.

PA Goodrich, B. F., Co., USA

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3894996	A	19750715	US 1973-373504	19730625
PRAI	US 1971-118173		19710223		

AB Accelerator systems for sulfur-vulcanizable rubbers, stable during processing and minimizing scorch, contained a thiuram compd. and an amine-blocked diisocyanate. Thus, an SBR rubber compn. contg. conventional vulcanization additives and sulfur 1.10 methyl zimate [137-30-4] with 1.32, and pyrrolidine-blocked diphenylmethane p,p'-diisocyanate (I) [38818-24-5], and vulcanized at 360.degree.F, had max. torque 65 in./lb, cure time 0.85 min, scorch time 0.51 min, and max. cure rate 16.50 in./lb, compared with 72, 1.49, 0.72, and 7.83, resp., in the absence of I.

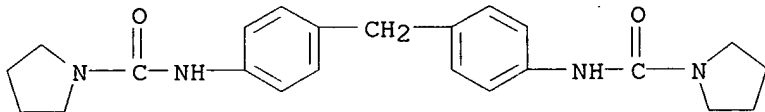
IT 38818-24-5

RL: USES (Uses)

(vulcanization accelerators, contg. thiuram compds., for SBR)

RN 38818-24-5 CAPLUS

CN 1-Pyrrolidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



*Same as
76*

L77 ANSWER 85 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1972:565831 CAPLUS
 DN 77:165831
 TI Delayed-action vulcanization accelerator system
 IN Srail, Raymond C.; Taylor, Ray D.
 PA Goodrich, B. F., Co.
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3692719	A	19720919	US 1970-96926	19701210
	CA 946092	A1	19740423	CA 1971-128025	19711118
	JP 51028110	B4	19760817	JP 1971-100102	19711210
PRAI	US 1970-96926		19701210		

AB A blocked isocyanate-polythiocarbonate mixture was a delayed action accelerator for unsatd. rubbers. Thus, an SBR-butadiene rubber vulcanization mixt. contg. polytrithiocarbonate [32198-31-5] and the reaction product of toluene diisocyanate [26471-62-5] and dimethylamine [124-40-3], milled at 150.deg.F for 5 min and then vulcanized at 360.deg.F, had a cure time of 1.60 and a scorch time of 0.62 compared with 2.75 and 1.30 for the mixt. vulcanized in the absence of the blocked isocyanate and polythiocarbonate.

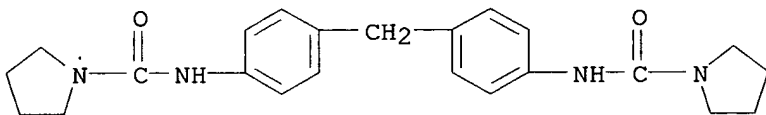
IT **38818-24-5 38818-25-6**

RL: USES (Uses)

(vulcanization accelerator systems contg.)

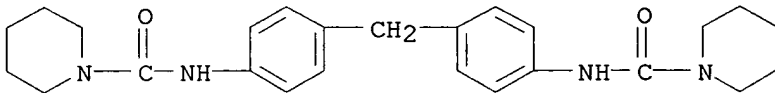
RN 38818-24-5 CAPLUS

CN 1-Pyrrolidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



RN 38818-25-6 CAPLUS

CN 1-Piperidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 76 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:516589 CAPLUS
 DN 83:116589
 TI Benzothiazole accelerator systems
 IN Srail, Raymond C.
 PA Goodrich, B. F., Co., USA
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3880787	A	19750429	US 1973-342747	19730319
PRAI	US 1971-118172		19710223		

AB Non-scorching accelerator systems for sulfur-vulcanizable rubbers contained mercaptobenzothiazole derivs. and amine-blocked diisocyanates and diisothiocyanates. Thus, SBr rubber contg. conventional vulcanization additives, 0.88 phr 2,2'-benzothiazyl disulfide [120-78-5] and 1.03 phr pyrrolidine-blocked diphenylmethane-p,p'-diisocyanate (I) [38818-24-5] had, at 330.degree. F, cure time 6.35, scorch time 1.95, and cure rate 11.9 and at 360.degree. F 2.68, 1.00 and 29.4 resp., as compared with 11.05 2.90, and 4.47, resp., and 4.34, 1.45, and 9.10, resp., in the absence of I.

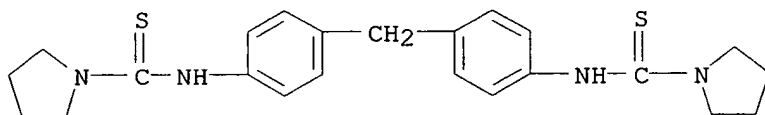
IT 56506-09-3

RL: USES (Uses)

(vulcanization accelerator contg. mercaptobenzothiazole and, nonscorching, for sulfur-vulcanizable rubber)

RN 56506-09-3 CAPLUS

CN 1-Pyrrolidinecarbothioamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



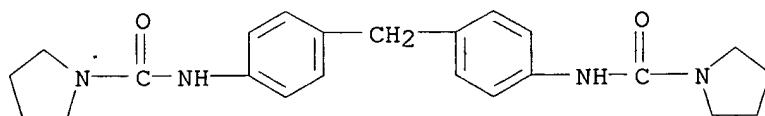
IT 38818-24-5

RL: USES (Uses)

(vulcanization accelerators contg. dithiobisbenzothiazole and, nonscorching, for sulfur-vulcanizable rubber)

RN 38818-24-5 CAPLUS

CN 1-Pyrrolidinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis- (9CI) (CA INDEX NAME)



L77 ANSWER 77 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:498398 CAPLUS
 DN 83:98398
 TI Low temperature-hardenable resin compositions
 IN Takahashi, Akio; Wajima, Motoyo; Tada, Ritsuro
 PA Hitachi, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

Same as
 #33

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50036599	A2	19750405	JP 1973-86841	19730803
PRAI	JP 1973-86841		19730803		

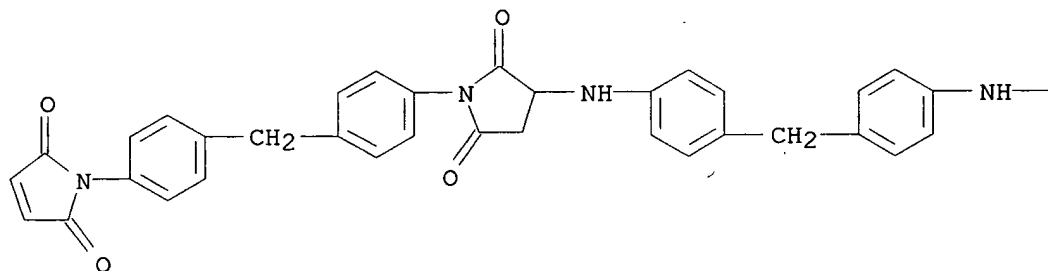
AB I (R, R1 = divalent groups contg. at least 2 C atoms and n = .apprx.10), epoxy compds. contg. at least 2 epoxy groups, and optionally amines contg. .gtoreq.2 active H atoms were mixed together to give the title heat-hardenable resin compns., useful for manufg. printed circuit plates. Thus, 65 parts I(R = R1 = (C6H4)CH2(C6H4); n = 1) [39664-22-7] and 30 parts ECN 1280 [37279-76-8] (CIBA, epoxy equiv. 233) were solid-blended and heated 60 min at 180.degree. to give a hardened product with ignition loss 22% at 410.degree. and LOI 73%.

IT **39664-22-7**
 RL: USES (Uses)
 (heat-hardenable resin compns. contg.)

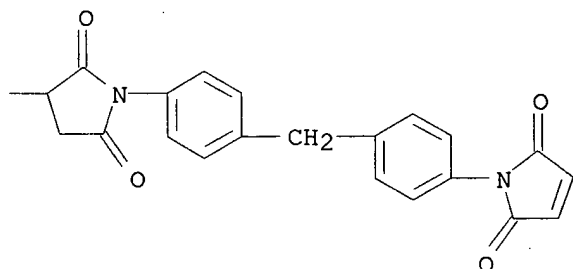
RN 39664-22-7 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[methylenebis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 78 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1975:460490 CAPLUS

DN 83:60490

TI Stabilized polymer compositions

IN Murayama, Keisuke; Morimura, Shoji; Matsui, Katsuaki; Kurumada, Tomoyuki; Ohta, Noriyuki; Watanabe, Ichiro

PA Sankyo Co., Ltd.

SO Ger. Offen., 61 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2349962	A1	19740418	DE 1973-2349962	19731004
	DE 2349962	B2	19760311		
	DE 2349962	C3	19761125		
	JP 49057046	A2	19740603	JP 1972-99599	19721004
	JP 55007861	B4	19800228		
	GB 1401924	A	19750806	GB 1973-45789	19731001
	CA 1022296	A1	19771206	CA 1973-182418	19731002
	CH 613714	A	19791015	CH 1973-14068	19731002
	NL 7313683	A	19740408	NL 1973-13683	19731004
	FR 2202128	A1	19740503	FR 1973-35463	19731004
PRAI	JP 1972-99599		19721004		

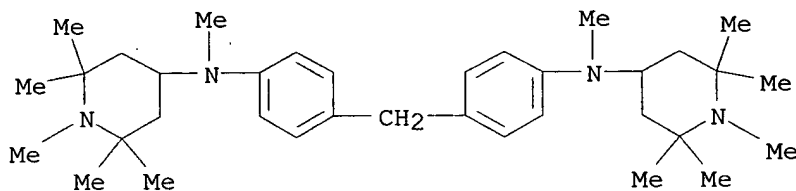
AB Polypropylene (I) [9003-07-0], polyethylene, polystyrene [9003-53-6], ABS [9003-56-9], nylon 6 [25038-54-4], a polycaprolactone-based polyurethane, PVC [9002-86-2], and a polyester were stabilized against uv light by 4-aminopiperidine derivs. (79 used) of which 45 were prepd. Thus, I contg. 0.25 phr 4-acrylamido-1,2,2,6,6-pentamethyl piperidine [52981-23-4] became brittle in 1,780 hr in a fadometer compared with 60 hrs for a control.

IT **52981-81-4**

RL: PEP (Physical, engineering or chemical process); PROC (Process) (light stabilizers, for polymers)

RN 52981-81-4 CAPLUS

CN 4-Piperidinamine, N,N'-(methylenedi-4,1-phenylene)bis[N,1,2,2,6,6-hexamethyl- (9CI) (CA INDEX NAME)



Same as # 74

L77 ANSWER 79 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:100265 CAPLUS
 DN 82:100265
 TI Polyester resin composition
 IN Watanabe, Toru; Ohno, Rinzo; Kato, Takashige; Sasaki, Singo; Tsukamoto, Kunio
 PA Japan Ester Co., Ltd.
 SO Ger. Offen., 56 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 2

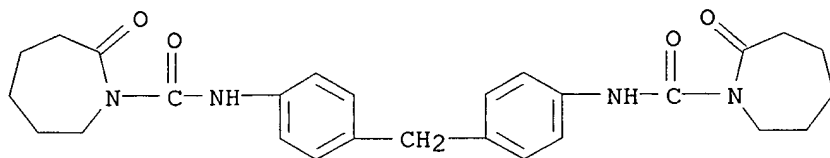
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2401312	A1	19740725	DE 1974-2401312	19740111
	JP 49098460	A2	19740918	JP 1973-6230	19730111
	JP 52022366	B4	19770617		
	JP 49106536	A2	19741009	JP 1973-15903	19730208
	JP 58011466	B4	19830303		
	JP 49120929	A2	19741119	JP 1973-33885	19730324
PRAI	JP 1973-6230		19730111		
	JP 1973-15903		19730208		
	JP 1973-33885		19730324		

AB Powder coatings with good resistance to heat and H₂O and good metal adhesion contain polyesters, d.p. 5-50, contg. as acids 40-80 and 20-60 mole % terephthalic and p-hydroxybenzoic acid, resp., and diglycidyl compds., hexakis(alkoxymethyl)melamines, or blocked isocyanates as crosslinkers. Thus, a 48:140:44 dimethyl terephthalate-ethylene glycol-methyl p-(2-hydroxyethoxy)benzoate polymer [36863-72-6], intrinsic viscosity 0.65, CO₂H content 21.5 equiv./106 g, is heated at 270.degree. with 8.00:5.33 bis(2-hydroxyethyl)terephthalate [959-26-2]-pentaerythritol [115-77-5] to give a polyester(I), d.p. 7.3, CO₂H and OH content 0.86 an 37.21 equiv/100 moles acid, resp., softening point 75.degree.. A mixt. of N,N'-[methylenebis(phenyleneiminocarbonyl)]biscaprolactam [54112-23-1] and I (NCO-OH ratio 1.07:1) is ground to 150 mesh, electrostatically sprayed to 100 .mu. on steel plate, and cured 30 min at 180.degree. to give a coating with DuPont impact strength 50 kg-cm, Erichsen test (JIS Z 2207) >9 mm, 60.degree. gloss 98%, reduced to 95% by 1 yr exterior weathering, and good resistance to H₂O, Me₂CO, and heat.

IT 54112-23-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agents, for polyester powder coatings)

RN 54112-23-1 CAPLUS

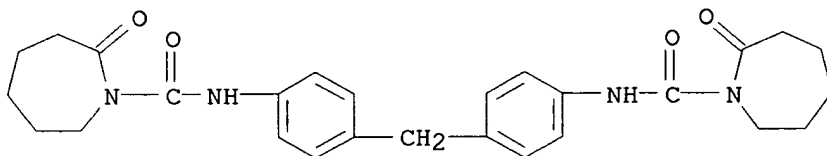
CN 1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)



L77 ANSWER 80 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:58939 CAPLUS
 DN 82:58939
 TI Crosslinked polyamides
 IN Doubravszky, Sandor; Frojimovics, Mrs. Gabor; Langer, Gyula; Schwartz, Gabor
 PA Muanyagipari Kutato Intezet
 SO Hung. Teljes, 13 pp.
 CODEN: HUXXB
 DT Patent
 LA Hungarian
 FAN.CNT 1

Same as #10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	HU 8222		19740528	HU 1972-MU493	19721013
AB	Polyamides having good impact strength, chem. resistance, and dimensional stability were prepd. by polymn. or copolymn. of lactams with alk. catalyst, melamine and activator-crosslinking agent (I, Z = p-methylenediphenylene, hexamethylene, 2-Me-1,4-phenylene) which controlled the rate of polymn. and the flexibility of the product. Thus, caprolactam 3300 (contg. 0.2% Na lactamate), caprolactam 3300, melamine 4.9, and I(Z = hexamethylene) 46 g were heated 1 hr at 140.degree. to give crosslinked polymer [25038-54-4] insol. in 96% H2SO4 contg. no shrinkage holes, 4.1% monomer, and impact strength 7.5 kg-cm/cm2 at 0.1% moisture content.				
IT	54112-23-1				
	RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agents, for nylon 6)				
RN	54112-23-1 CAPLUS				
CN	1H-Azepine-1-carboxamide, N,N'-(methylenedi-4,1-phenylene)bis[hexahydro-2-oxo- (9CI) (CA INDEX NAME)				



L77 ANSWER 81 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1973:466854 CAPLUS

DN 79:66854

TI Polyaspartimides. Condensation of aromatic diamines and bismaleimide compounds

AU Crivello, James V.

CS Corp. Res. Dev., Electr. Co., Schenectady, NY, USA

SO Journal of Polymer Science, Polymer Chemistry Edition (1973), 11(6), 1185-200

CODEN: JPLCAT; ISSN: 0449-296X

DT Journal

LA English

AB The reaction of n-phenylmaleimide [941-69-5] and aniline [62-53-3] was studied and used as a model system for the prepn. of high mol. wt. polymers from bismaleimides and aromatic diamines. Weak Broensted acids have a marked catalytic effect on the reaction and a no. of model aspartimides (I, R = Ph, p-C₆H₄CH₂C₆H₄-p; R₁ = Ph, p-ClC₆H₄, p-C₆H₄, p-C₆H₄CH₂C₆H₄-p; R₂ = H, Me; m = 1,2) were prepd. using HOAc as a reaction medium. Bismaleimides (II, Q = p-C₆H₄CH₂C₆H₄-p, p-C₆H₄OC₆H₄-p, p-C₆H₄) were prepd. and condensed with p-H₂NC₆H₄CH₂C₆H₄NH₂-p, m-C₆H₄(NH₂)₂, p-C₆H₄(NH₂)₂, and p-H₂NC₆H₄OC₆H₄NH₂-p in cresol contg. a small amt of protonic acid to give polyaspartamides (III, Q₁ = m- and p-C₆H₄, p-C₆H₄OC₆H₄-p, p-C₆H₄CH₂C₆H₄-p). III have limited thermal stability but exhibit good processing characteristics.

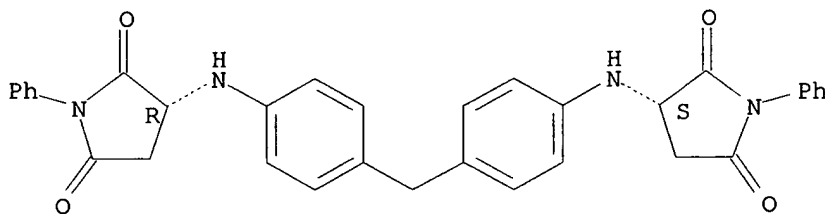
IT 42893-33-4P 42893-75-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 42893-33-4 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-phenyl-
, (R*,S*)- (9CI) (CA INDEX NAME)

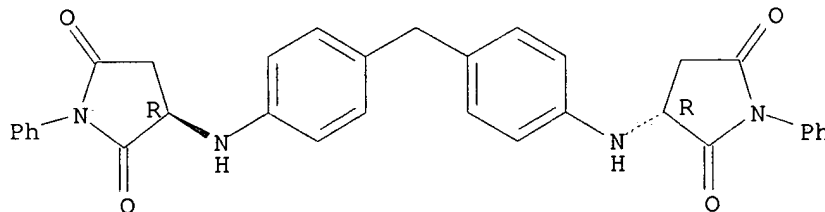
Relative stereochemistry.



RN 42893-75-4 CAPLUS

CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-phenyl-
, (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



Same as
#44

L77 ANSWER 82 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1973:137012 CAPLUS

DN 78:137012

TI Activators for production of polyamides

IN Gilch, Heinrich; Botta, Artur; Schnell, Hermann; Krimm, Heinrich

PA Farbenfabriken Bayer A.-G.

SO Brit., 6 pp.

CODEN: BRXXAA

DT Patent

LA English

FAN.CNT 1

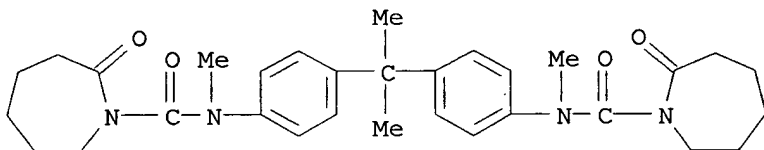
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1276318		19720601		
PRAI	DE 1968-1770968		19680724		

AB By using a caprolactam carboxylic amide fully substituted at the primary amide N as activator for the anionic polymn. of caprolactam [105-60-2], undesirable side reactions caused by lactam N-carboxylic amide decompn. to isocyanate were eliminated. Polymn. temps. of 140-60.deg. were used. After a 30 min induction period caprolactam was polymd. in 45 min at 160.deg. by MeONa with caprolactam-N-carboxylic acid dimethylamide [38901-98-3] as activator. The product, relative viscosity 5.3, contained 4.5% monomers and oligomers extractable into MeOH.

IT **39510-64-0**
 RL: CAT (Catalyst use); USES (Uses)
 (promoters, for alk. catalysts for anionic polymn. of caprolactam)

RN 39510-64-0 CAPLUS

CN 1H-Azepine-1-carboxamide, N,N'-[(1-methylethylidene)di-4,1-phenylene]bis[hexahydro-N-methyl-2-oxo- (9CI) (CA INDEX NAME)]



L77 ANSWER 83 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1973:111952 CAPLUS
 DN 78:111952
 TI Polyimides
 IN Crivello, James Vincent
 PA General Electric Co.
 SO Ger. Offen., 32 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2234149	A1	19730125	DE 1972-2234149	19720712
	US 3766138	A	19731016	US 1971-163410	19710716
	GB 1392628	A	19750430	GB 1972-27666	19720613
	CA 982736	A1	19760127	CA 1972-145761	19720627
	BE 786120	A1	19721103	BE 1972-119728	19720711
	FR 2146253	A1	19730302	FR 1972-25148	19720711
	AT 321581	B	19750410	AT 1972-6047	19720713
	NL 7209825	A	19730118	NL 1972-9825	19720714
	IT 962887	A	19731231	IT 1972-27039	19720715
	US 3855239	A	19741217	US 1973-325065	19730119
PRAI	US 1971-163410		19710716		

AB Polyimides are prepd. by polymn. of the maleimide derivs. I (R1, R2 = divalent radicals) with H2S or disulfides in the presence of proton-donor catalysts. Thus, refluxing 3.96 g 4,4'-diaminodiphenylmethane [101-77-9], 14.3 g N,N'-(methylenedi-p-phenylene)dimaleimide [13676-54-5], and 200 ml HOAc 2 hr gives 18.1 g 3,3'-[(methylenedi-p-phenylene)diimino]bis[N-(p-(maleimidobenzyl)phenyl)succinimide] (I, R1 = R2 = methylenedi-p-phenylene) (II) [39664-22-7]. Passing 1 l./hr H2S through a soln. of 5 g II and 2 drops tetramethylethylenediamine in 50 ml cresol 1 hr at 58.deg. gives hydrogen sulfide-3,3'-[(methylenedi-p-phenylene)diimino]bis[N-(p-(p-maleimidobenzyl)phenyl)succinimide]copolymer [39664-70-5], intrinsic viscosity 0.58 dl/g.

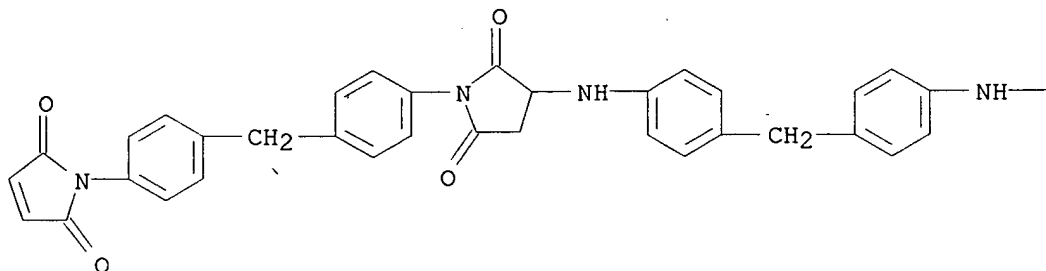
IT 39664-22-7 39972-84-4 40043-37-6

RL: USES (Uses)
 (in polyimide manuf.)

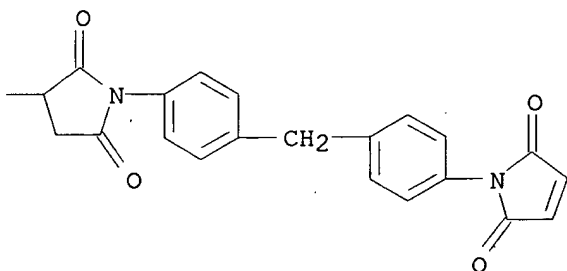
RN 39664-22-7 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[methylenebis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

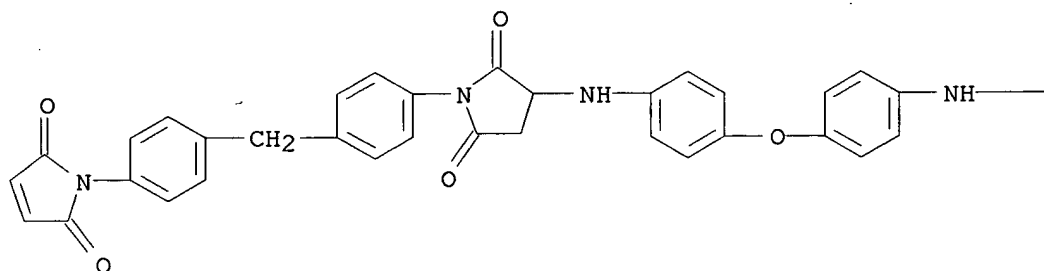


PAGE 1-B

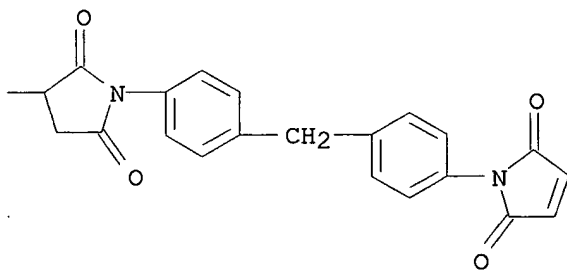


RN 39972-84-4 CAPLUS
 CN 1H-Pyrrole-2,5-dione, 1,1'-[oxybis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

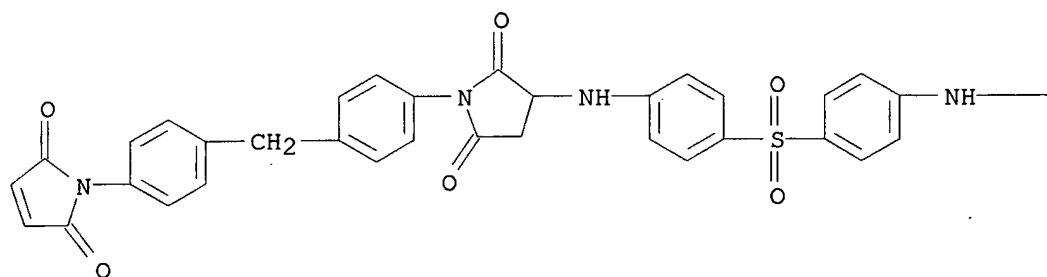


PAGE 1-B

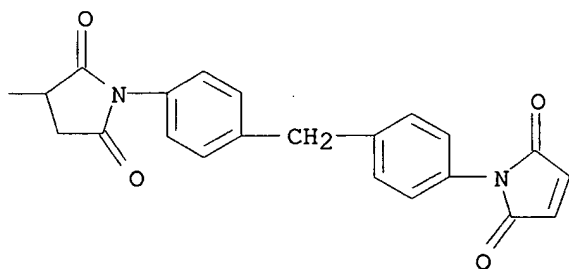


RN 40043-37-6 CAPLUS
 CN 1H-Pyrrole-2,5-dione, 1,1'-[sulfonylbis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L77 ANSWER 84 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1973:84060 CAPLUS

DN 78:84060

TI Bisphenoxy acid derivatives

IN Suzuki, Yoshio; Minai, Masayoshi; Hamma, Noritaka; Murayama, Eiichi; Aono, Shunji

PA Sumitomo Chemical Co., Ltd.

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48000552	A2	19730106	JP 1971-34867	19710522
	FI 54289	C	19781110	FI 1972-1425	19720519
PRAI	JP 1971-34866	A	19710522		
	JP 1971-34867	A	19710522		

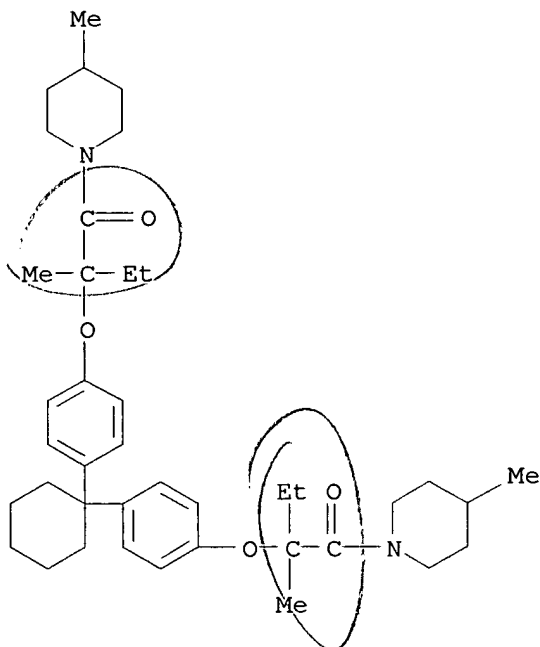
AB Title compds. (I), useful as remedies for arteriosclerosis, were prepd. from the corresponding acids. Thus, 2.6 g ClCO₂Et, 4.7 g I (R = Et, R₁ = OH), NEt₃, and CH₂Cl₂ was treated with H₂NCH₂CH₂OH to give 2.7 g I [R = Et, R₁ = NH(CH₂)₂OH]. Similarly prepd. I were (R and R₁ given): Me, NH(CH₂)₂OAc; Et, morpholino; Et, 4-methylpiperidino; Et, 2-pyridylamino; and Me, NH(CH₂)₂NHCO₂CH₂Ph.

IT **39755-48-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 39755-48-1 CAPLUS

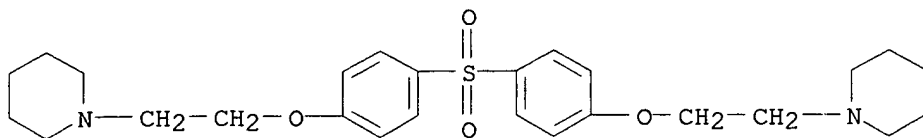
CN Piperidine, 1,1'-[cyclohexylidenebis[4,1-phenyleneoxy(2-ethyl-2-methyl-1-oxo-2,1-ethanediyl)]]bis[4-methyl- (9CI) (CA INDEX NAME)



L77 ANSWER 86 OF 86 CAPLUS COPYRIGHT 2003 ACS
 AN 1959:45217 CAPLUS
 DN 53:45217
 OREF 53:8142b-g
 TI Preparation and pharmacology of some ethylalkylamine ethers derived from hydroxy and dihydroxydiphenyl sulfones and their quaternary salts
 AU Carissimi, M.; Ravenna, F.; Milla, E.; Grumelli, E.
 CS Maggione and C. S.p.A., Milan
 SO Farmaco (Pavia) Ed. sci. (1958), 13, 800-16
 DT Journal
 LA Unavailable
 AB Adding to 0.05 mole (4-HOC₆H₄)₂SO₂ in 150 cc. Me₂CO at 60.degree. 0.11 mole ClC₂H₄NR₂, refluxing 5 hrs., filtering, evapg. in vacuo to dryness, washing the residue with water, and dissolving in HCl in EtOH gave by pptg. with Et₂O (p-ROC₆H₄)₂SO₂.2HCl (R, % yield, m.p., and solvent of crystn. given): CH₂CH₂NEt₂ (I), 93, oily, -; CH₂CH₂N(CH₂)₅ (II), 70, 258.degree., EtOH-iso-PrOH; CH₂CH₂N(CH₂CH₂)₂O (III), 70, 240-2.degree., 95% EtOH. By the procedure as described were prepd. 4,4'-O₂NC₆H₄SO₂C₆H₄OR (same data given): CH₂CH₂NEt₂.HCl (IV), 60, 218-19.degree., EtOH; CH₂CH₂N(CH₂)₅.HCl (V), 85, 248-9.degree., EtOH-iso-PrOH; CH₂CH₂N(CH₂CH₂)₂O.HCl (VI), 50, 217.degree., EtOH. Reducing IV and V (0.005 mole each) in 250 EtOH with H in the presence of 0.1 g. PtO₂, evapg. the filtered soln., dissolving in EtOH contg. HCl, and pptg. with Et₂O gave the corresponding amino derivs. (VII), m. 100.degree. (decompn.) (EtOH and Et₂O), and (VIII), purified as free base, m. 142-3.degree. (EtOH), resp. Heating 1 g. VI with 10 g. Sn, 20 cc. AcOH, and 5 cc. HCl 1 hr., dilg. with 150 cc. H₂O, pptg. the Sn with H₂S, filtering, alkalinizing with NaOH, extg. with AcOEt, washing, drying, evapg., adding to the residue HCl in EtOH, and pptg. with Et₂O gave 0.5 g. 4,4'-H₂NC₆H₄C₆H₄CH₂CH₂N(CH₂CH₂)₂O.HCl, m. 212.degree. (iso-PrOH). The quaternary compds. of the dihydroxy and NO₂ compds. were prepd. by refluxing 0.01 mole basic ether with 25 cc. EtI, removing the excess EtI in vacuo, and crystg. from Et₂O. The morpholino compds. were prepd. by refluxing with EtI in EtOH 12 hrs. Quaternary compds. prepd. were (compd., % yield, and m.p. given): I.2EtI, 92, 80-5.degree.; II.2EtI, 82, 155-60.degree. (decompn.); III.2EtI, 75, 80.degree. (decompn.); IV.EtI, 60, 188-90.degree. (EtOH); V.EtI, 54, 170-1.degree. (EtOH); VI.EtI, 82, 198-200.degree. (80% EtOH); VII.EtI, -, 135-7.degree. (EtOH-Et₂O); VIII.EtI, -, 155.degree. (decompn.). The compds. had no bacteriostatic activity. The tertiary compds. had an insignificant hypotensive effect, the quaternary compds. had a curare-like action. Quaternary N derivs. with an NH₂ group in position 4 inhibited at the ganglionic level and not at the neuromuscular junction in contrast to those contg. an NO₂ group.

IT **120639-06-7**, Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di-, dihydrochloride **120639-07-8**, Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di- (prepn. of)

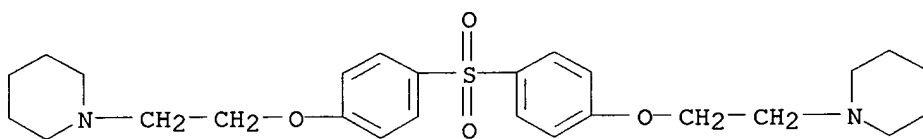
RN 120639-06-7 CAPLUS
 CN Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di-, dihydrochloride (6CI) (CA INDEX NAME)



● 2 HCl

RN 120639-07-8 CAPLUS

CN Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di- (6CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 17:59:32 ON 14 MAY 2003)

FILE 'REGISTRY' ENTERED AT 17:59:37 ON 14 MAY 2003

```

L1      SCREEN 1841
L2      SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L3      STRUCTURE UPLOADED
L4      QUE L3 AND L1 NOT L2
L5      0 S L4 SSS SAM
L6      SCREEN 1841
L7      SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L8      STRUCTURE UPLOADED
L9      QUE L8 AND L6 NOT L7
L10     0 S L9 SSS SAM
L11     SCREEN 1841
L12     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L13     STRUCTURE UPLOADED
L14     QUE L13 AND L11 NOT L12
L15     0 S L14 SSS SAM
L16     SCREEN 1841
L17     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L18     STRUCTURE UPLOADED
L19     QUE L18 AND L16 NOT L17
L20     0 S L19 SSS SAM
L21     SCREEN 1841
L22     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L23     STRUCTURE UPLOADED
L24     QUE L23 AND L21 NOT L22
L25     0 S L24 SSS SAM
L26     SCREEN 1841
L27     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L28     STRUCTURE UPLOADED
L29     QUE L28 AND L26 NOT L27
L30     0 S L29 SSS SAM
L31     SCREEN 1841 AND 1993
L32     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L33     STRUCTURE UPLOADED
L34     QUE L33 AND L31 NOT L32
L35     0 S L34 SSS SAM
L36     SCREEN 1841 AND 1993
L37     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L38     STRUCTURE UPLOADED
L39     QUE L38 AND L36 NOT L37
L40     1 S L39 SSS SAM
L41     SCREEN 1841 AND 1993
L42     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L43     STRUCTURE UPLOADED
L44     QUE L43 AND L41 NOT L42
L45     1 S L44 SSS SAM
L46     SCREEN 1841 AND 1993
L47     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L48     STRUCTURE UPLOADED
L49     QUE L48 AND L46 NOT L47
L50     1 S L49 SSS SAM
L51     SCREEN 1841 AND 1993
L52     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
L53     STRUCTURE UPLOADED

```

L54 QUE L53 AND L51 NOT L52
 L55 0 S L54 SSS SAM
 L56 SCREEN 1841 AND 1993
 L57 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
 L58 STRUCTURE UPLOADED
 L59 QUE L58 AND L56 NOT L57
 L60 0 S L59 SSS SAM
 L61 SCREEN 1841 AND 1993
 L62 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
 L63 STRUCTURE UPLOADED
 L64 QUE L63 AND L61 NOT L62
 L65 0 S L64 SSS SAM
 L66 SCREEN 1841 AND 1993
 L67 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
 L68 STRUCTURE UPLOADED
 L69 QUE L68 AND L66 NOT L67
 L70 0 S L69 SSS SAM
 L71 SCREEN 1841 AND 1993
 L72 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047 OR 12
 L73 STRUCTURE UPLOADED
 L74 QUE L73 AND L71 NOT L72
 L75 0 S L74 SSS SAM
 L76 143 S L74 SSS FUL

L77 FILE 'CAPLUS' ENTERED AT 18:25:14 ON 14 MAY 2003
 86 S L76

FILE 'CAOLD' ENTERED AT 18:26:13 ON 14 MAY 2003

=> s 176
 L78 1 L76
 => d 178 bib,hitstr

L78 ANSWER 1 OF 1 CAOLD COPYRIGHT 2003 ACS

AN CA53:8142c CAOLD

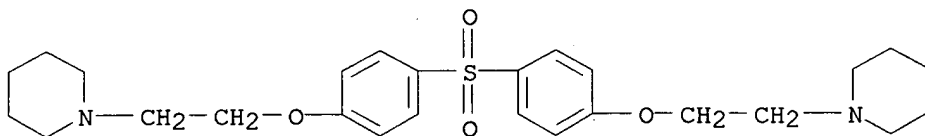
TI prepn. and pharmacology of ethylalkylamine ethers derived from hydroxy and dihydroxydiphenyl sulfones and their quaternary salts

AU Carissimi, M.; Ravenna, F.; Milla, E.; Grumelli, E.

IT 120639-06-7 120639-07-8

RN 120639-06-7 CAOLD

CN Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di-, dihydrochloride (6CI) (CA INDEX NAME)

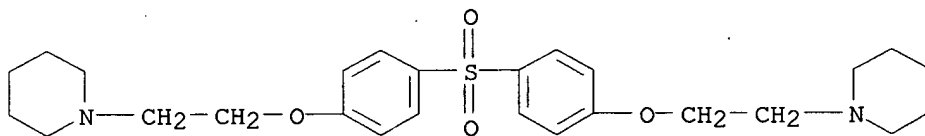


Same as #86.

● 2 HCl

RN 120639-07-8 CAOLD

CN Piperidine, 1,1'-[sulfonylbis(p-phenyleneoxyethylene)]di- (6CI) (CA INDEX NAME)



L77 ANSWER 44 OF 86 CAPLUS COPYRIGHT 2003 ACS

AN 1984:531277 CAPLUS

DN 101:131277

TI Amine-terminated bisaspartimides, and their polymers

IN Kumar, Devendra; Fohlen, George M.; Parker, John A.

PA National Research Council, Washington, USA; United States National Aeronautics and Space Administration

SO U. S. Pat. Appl., 18 pp.

CODEN: XAXXAV

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 561702	A0	19840525	US 1983-561702	19831215
	US 4600769	A	19860715	US 1985-739760	19850531
	US 4579782	A	19860401	US 1985-771538	19850830
PRAI	US 1983-561702		19831215		
	US 1985-739760		19850531		

AB Amine-terminated bisaspartimides, which can be polymd. and used in prepg. graphite cloth laminates, are prepd. by Michael condensation of an arom. bismaleimide and an arom. diamine. Thus, 5.94 g 4,4'-diaminodiphenylmethane [101-77-9], 5.37 g 4,4'-bismaleimidodiphenylmethane [13676-54-5], and 50 mL AcNMe₂ were mixed with 1-2 mL HOAc, heated 6-7 h at 110-120.degree., and cooled to give 7 g 4,4'-bis[N2-[4-(4-aminobenzyl)phenyl]aspartimido]diphenylmethane (I) [84805-79-8]. I homopolymer [91883-55-5] was stable in air or N at .gtoreq.370.degree..

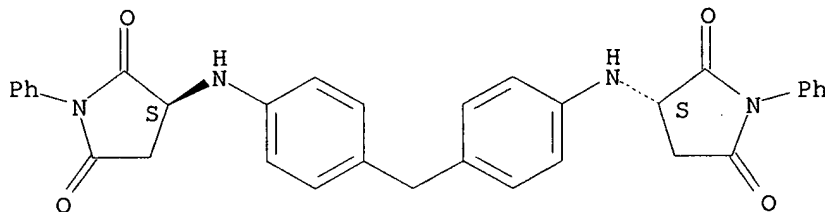
IT 92076-41-0P

RL: PREP (Preparation)
(prepn. of)

RN 92076-41-0 CAPLUS

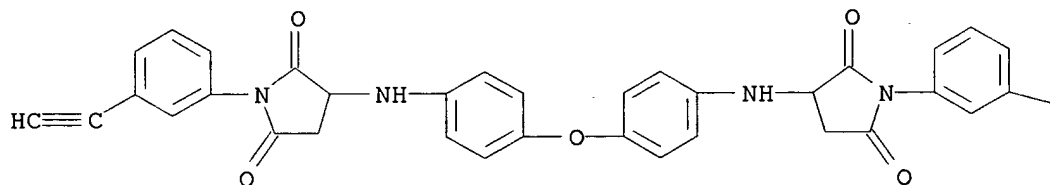
CN 2,5-Pyrrolidinedione, 3,3'-[methylenebis(4,1-phenyleneimino)]bis[1-phenyl-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

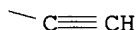


L95 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1986:609781 CAPLUS
 DN 105:209781
 TI Acetylene-terminated aspartimides
 AU Hergenrother, P. M.; Havens, S. J.; Connell, J. W.
 CS NASA Langley Res. Cent., Hampton, VA, 23665, USA
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1986), 27(2), 408-9
 CODEN: ACPPAY; ISSN: 0032-3934
 DT Journal
 LA English
 AB Two kinds of acetylene-terminated aspartimides (ATA's) were prep'd. by treating 3-aminophenylacetylene [54060-30-9] with N,N'-bismaleimido-4,4'-diphenylmethane [13676-54-5] or by treating N-(3-ethynylphenyl)maleimide [105280-01-1] with arom. diamines. The ATA's were blended with acetylene-terminated polysulfones to give moldings, adhesives, and fiber-reinforced composites. The cured blends had higher crit. stress intensity factors than those of cured polyimides.
 IT **105247-70-9P 105247-71-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and curable blends of, with acetylene-terminated polysulfones)
 RN 105247-70-9 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[oxybis(4,1-phenyleneimino)]bis[1-(3-ethynylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

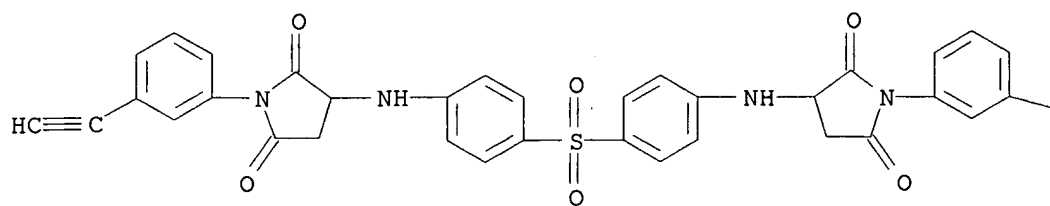


PAGE 1-B

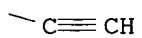


RN 105247-71-0 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[sulfonylbis(4,1-phenyleneimino)]bis[1-(3-ethynylphenyl)- (9CI) (CA INDEX NAME)

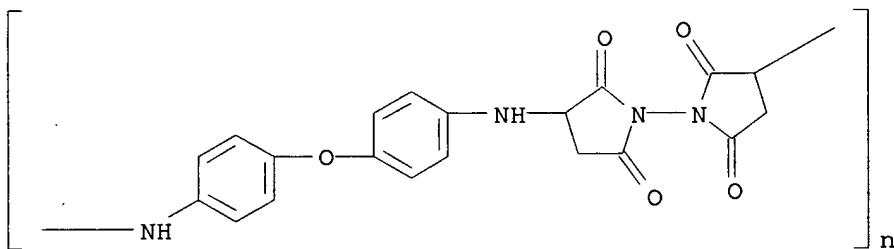
PAGE 1-A



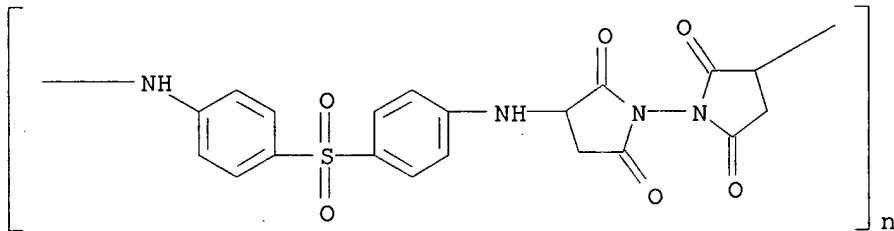
PAGE 1-B



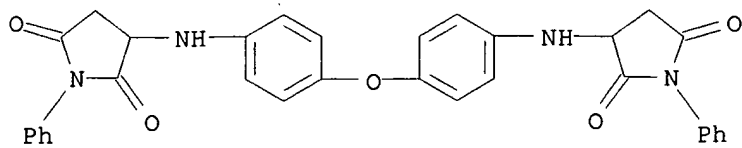
L95 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1979:439914 CAPLUS
 DN 91:39914
 TI Polydisuccinimides. Polyaddition reactions of aliphatic and aromatic diamines to N,N'-bismaleimide
 AU Gherasim, M. G.; Zugravescu, I.
 CS Inst. Macromol. Chem. "P. Poni", Iasi, Rom.
 SO European Polymer Journal (1978), 14(12), 985-90
 CODEN: EUPJAG; ISSN: 0014-3057
 DT Journal
 LA English
 AB The addn. reactions of N,N'-bismaleimide (I) [6903-84-0] with aliph. and arom. amines and diamines were investigated together with those of the model compd. N-phenylmaleimide [941-69-5]. The mechanism of the addn. reaction is ionic in polar solvents and homolytic in nonpolar solvents. Arom. amines were less reactive than the aliph. amines, which caused an opening of the imide ring structure. The reaction of 11 arom. and 3 aliph. diamines with I gave polymers II (Z = e.g. C₆H₄, biphenyl) and [-COCH:CHCONHNHCOCH:CHCONH(CH₂)_pNH]_m (p = 2, 4, 6), resp. The polymers were characterized by IR spectra, viscosity, and thermal anal. methods.
 IT **70678-24-9P 70678-25-0P 70689-32-6P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 70678-24-9 CAPLUS
 CN Poly[(2,2',5,5'-tetraoxo[1,1'-bipyrrolidine]-3,3'-diyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)



RN 70678-25-0 CAPLUS
 CN Poly[(2,2',5,5'-tetraoxo[1,1'-bipyrrolidine]-3,3'-diyl)imino-1,4-phenylenesulfonyl-1,4-phenyleneimino] (9CI) (CA INDEX NAME)



RN 70689-32-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[oxybis(4,1-phenyleneimino)]bis[1-phenyl- (9CI)
 (CA INDEX NAME)



L95 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1973:111952 CAPLUS
 DN 78:111952
 TI Polyimides
 IN Crivello, James Vincent
 PA General Electric Co.
 SO Ger. Offen., 32 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2234149	A1	19730125	DE 1972-2234149	19720712
	US 3766138	A	19731016	US 1971-163410	19710716
	GB 1392628	A	19750430	GB 1972-27666	19720613
	CA 982736	A1	19760127	CA 1972-145761	19720627
	BE 786120	A1	19721103	BE 1972-119728	19720711
	FR 2146253	A1	19730302	FR 1972-25148	19720711
	AT 321581	B	19750410	AT 1972-6047	19720713
	NL 7209825	A	19730118	NL 1972-9825	19720714
	IT 962887	A	19731231	IT 1972-27039	19720715
	US 3855239	A	19741217	US 1973-325065	19730119

PRAI US 1971-163410 19710716

AB Polyimides are prepd. by polymn. of the maleimide derivs. I (R1, R2 = divalent radicals) with H2S or disulfides in the presence of proton-donor catalysts. Thus, refluxing 3.96 g 4,4'-diaminodiphenylmethane [101-77-9], 14.3 g N,N'-(methylenedi-p-phenylene)dimaleimide [13676-54-5], and 200 ml HOAc 2 hr gives 18.1 g 3,3'-[(methylenedi-p-phenylene)diimino]bis[N-(p-(maleimidobenzyl)phenyl)succinimide] (I, R1 = R2 = methylenedi-p-phenylene) (II) [39664-22-7]. Passing 1 l./hr H2S through a soln. of 5 g II and 2 drops tetramethylethylenediamine in 50 ml cresol 1 hr at 58.deg. gives hydrogen sulfide-3,3'-[(methylenedi-p-phenylene)diimino]bis[N-(p-(maleimidobenzyl)phenyl)succinimide]copolymer [39664-70-5], intrinsic viscosity 0.58 dl/g.

IT **39972-84-4 40043-37-6**

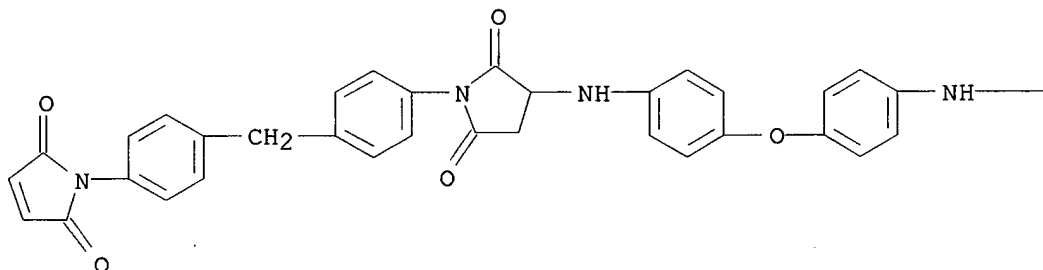
RL: USES (Uses)

(in polyimide manuf.)

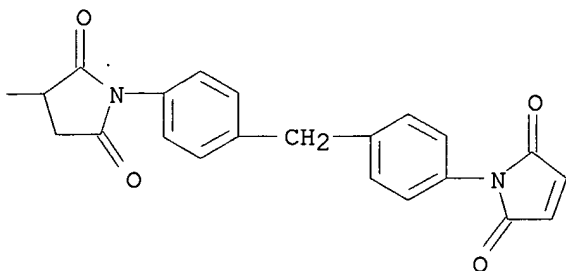
RN 39972-84-4 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[oxybis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



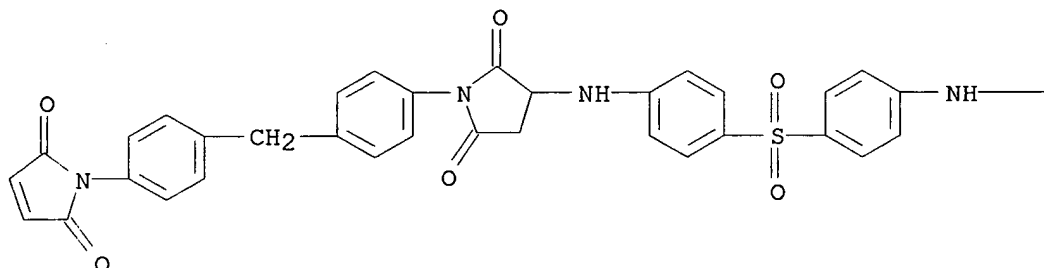
PAGE 1-B



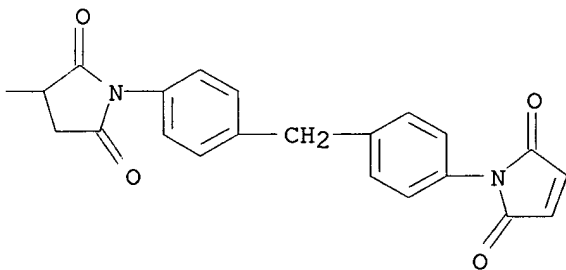
RN 40043-37-6 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[sulfonylbis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 39983-87-4P 39983-88-5P 39983-91-0P

39983-92-1P 39989-73-6P 39989-76-9P

39989-77-0P 40698-57-5P

RL: PREP (Preparation)

(prepn. of)

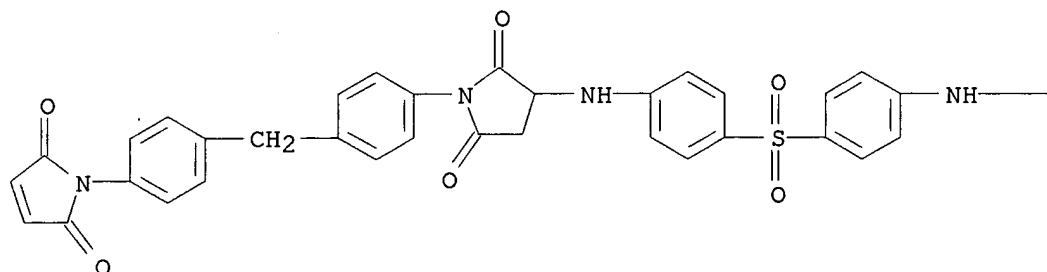
RN 39983-87-4 CAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[sulfonylbis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis-, polymer with hydrogen sulfide (H2S) (9CI) (CA INDEX NAME)

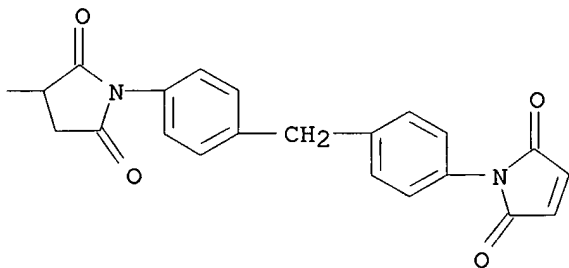
CM 1

CRN 40043-37-6
CMF C54 H40 N6 O10 S

PAGE 1-A



PAGE 1-B



CM 2

CRN 7783-06-4
CMF H2 S

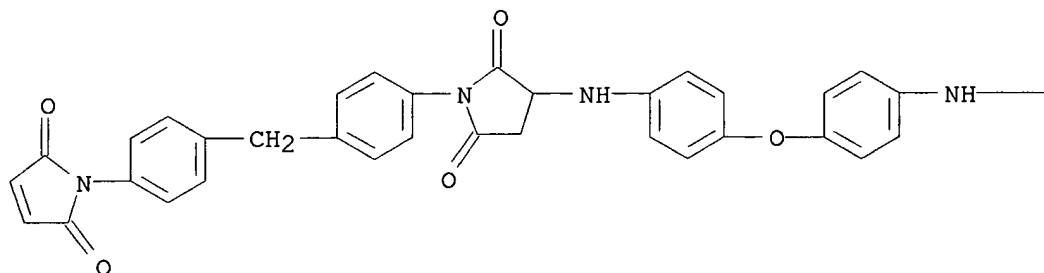
H₂S

RN 39983-88-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1,1'-[oxybis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis-, polymer with hydrogen sulfide (H₂S) (9CI) (CA INDEX NAME)

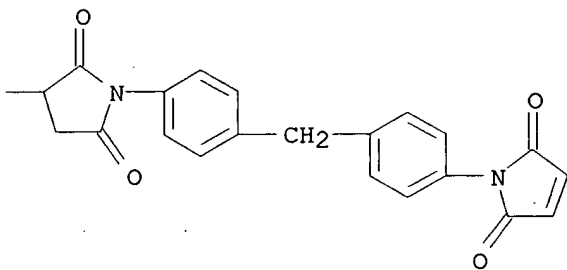
CM 1

CRN 39972-84-4
CMF C54 H40 N6 O9

PAGE 1-A



PAGE 1-B



CM 2

CRN 7783-06-4

CMF H2 S

H₂S

RN 39983-91-0 CAPLUS

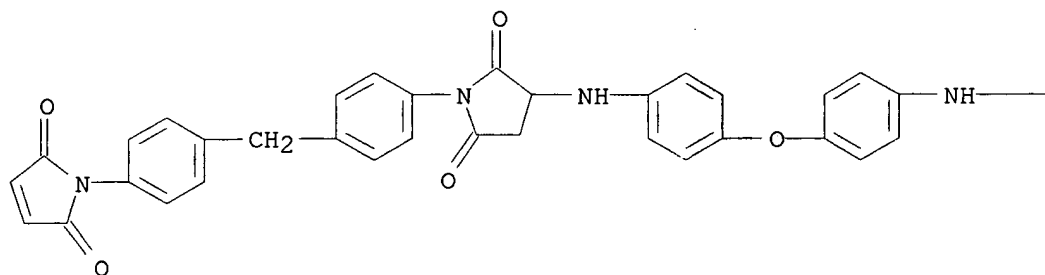
CN Acetic acid, mercapto-, 1,2-ethanediyl ester, polymer with
 1,1'-[oxybis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-
 phenylenemethylene-4,1-phenylene]]bis[1H-pyrrole-2,5-dione] (9CI) (CA
 INDEX NAME)

CM 1

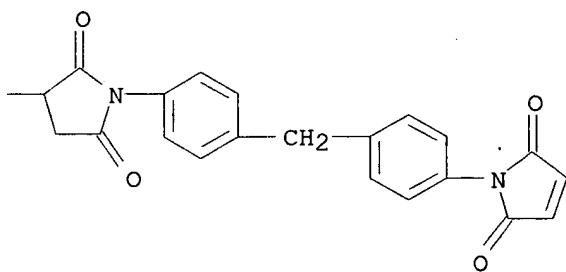
CRN 39972-84-4

CMF C54 H40 N6 O9

PAGE 1-A



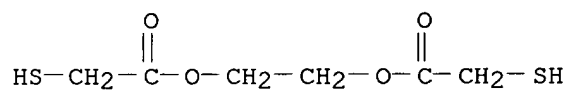
PAGE 1-B



CM 2

CRN 123-81-9

CMF C6 H10 O4 S2



RN 39983-92-1 CAPLUS

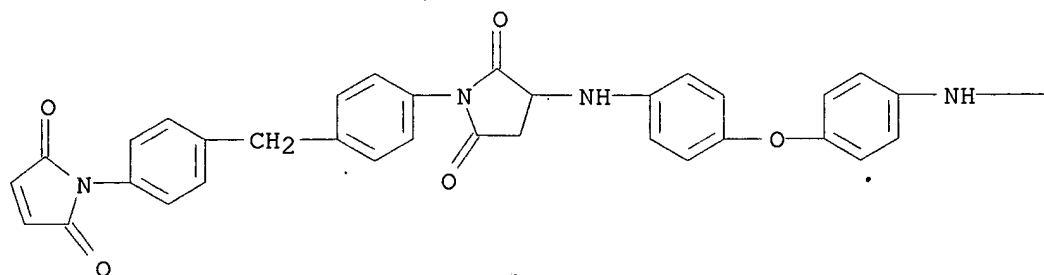
CN 1H-Pyrrole-2,5-dione, 1,1'-[oxybis[4,1-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-4,1-phenylenemethylene-4,1-phenylene]]bis-, polymer with 1,10-decanedithiol (9CI) (CA INDEX NAME)

CM 1

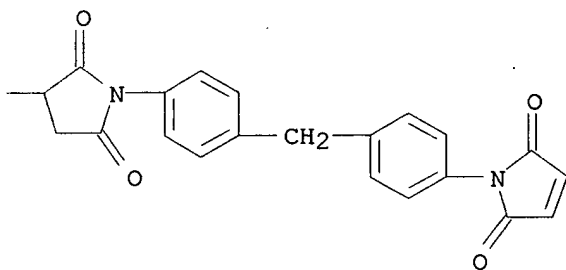
CRN 39972-84-4

CMF C54 H40 N6 O9

PAGE 1-A



PAGE 1-B



CM 2

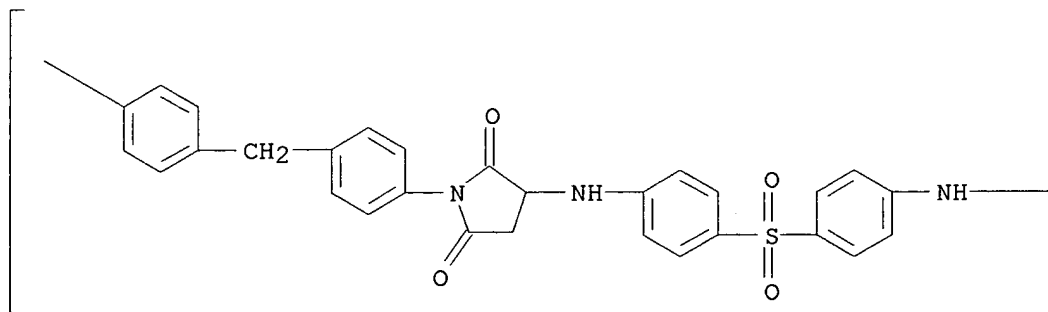
CRN 1191-67-9

CMF C10 H22 S2

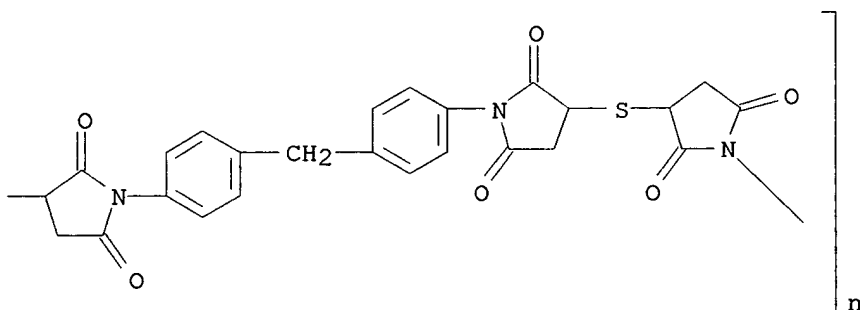
HS- (CH₂)₁₀-SH

RN 39989-73-6 CAPLUS

CN Poly[(2,5-dioxo-1,3-pyrrolidinediyl)thio(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylenesulfonyl-1,4-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene] (9CI) (CA INDEX NAME)

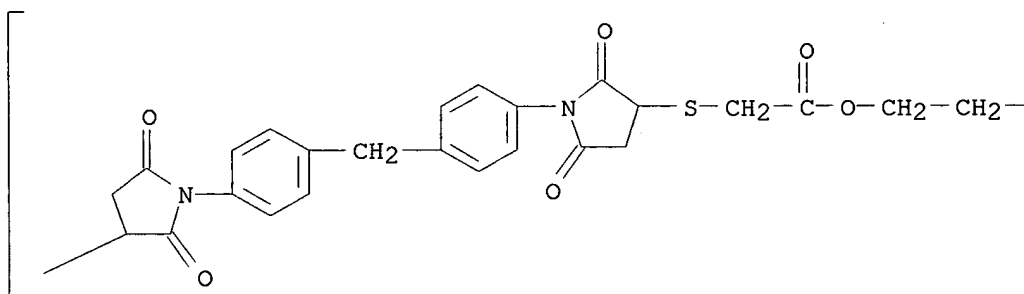


PAGE 1-B

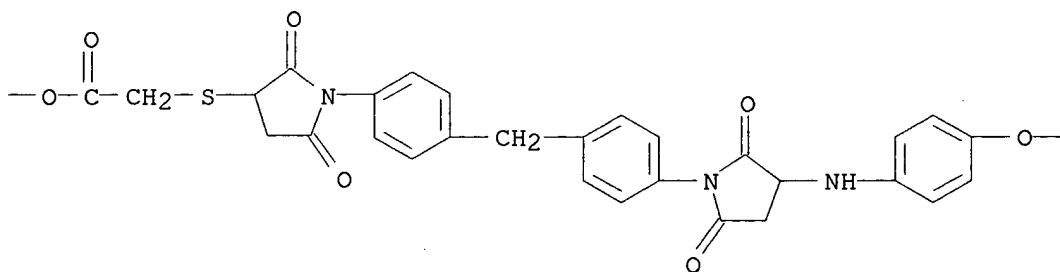


CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)thio(2-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl]oxy(1-oxo-1,2-ethanediyl)thio(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino]. (9CI) (CA INDEX NAME)

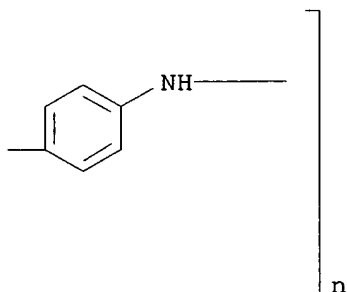
PAGE 1-A



PAGE 1-B

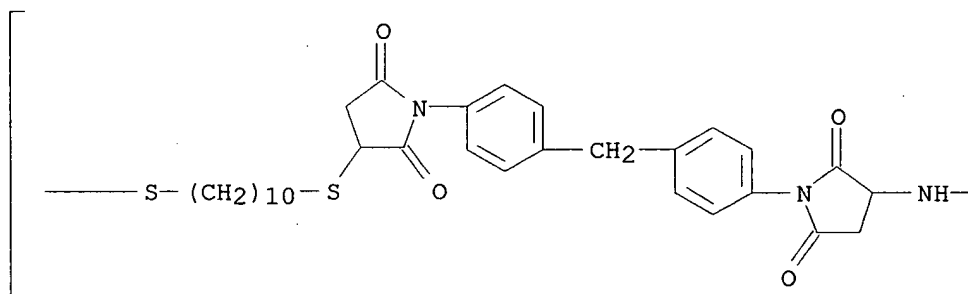


PAGE 1-C

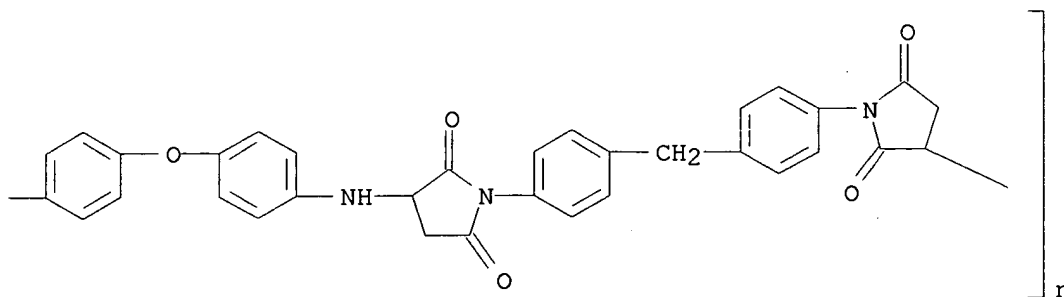


RN 39989-77-0 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)thio-1,10-decanediylthio] (9CI)
 (CA INDEX NAME)

PAGE 1-A



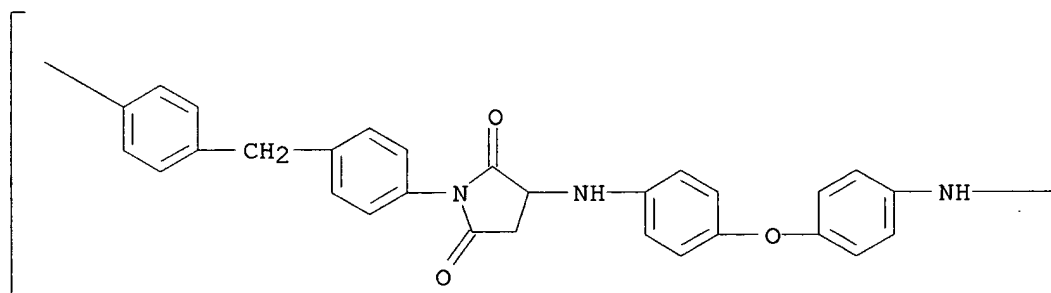
PAGE 1-B



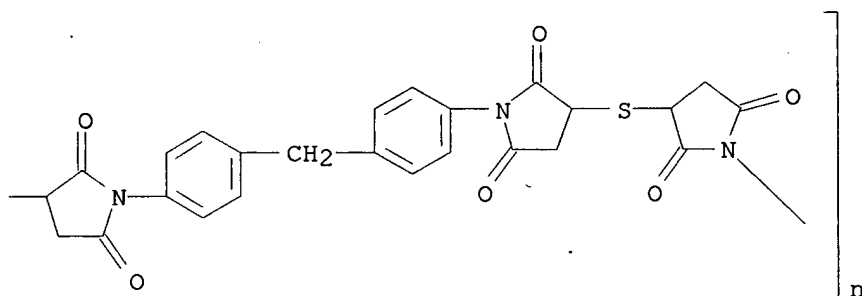
RN 40698-57-5 CAPLUS

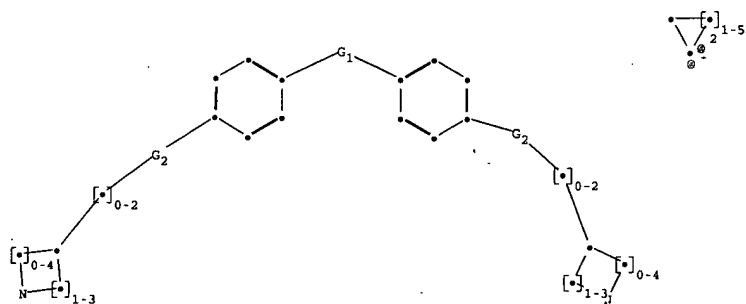
CN Poly[(2,5-dioxo-1,3-pyrrolidinediyl)thio(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





chain nodes :

13 15 16 18 19

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 20 21 22 23 24 25 26 27 41 42 43

chain bonds :

3-15 6-13 9-13 12-16 15-18 16-19 18-20 19-21

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 20-22 20-24 21-25
21-27 22-23 23-24 25-26 26-27 41-42 41-43 42-43

exact/norm bonds :

3-15 6-13 9-13 12-16 15-18 16-19 20-22 20-24 22-23 23-24 41-42 41-43 42-43

exact bonds :

18-20 19-21 21-25 21-27 25-26 26-27

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 20 : 21 :

G1:O,S,N,SO2, [*1-*2]

G2:O,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:CLASS 15:CLASS 16:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom
23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 41:Atom 42:Atom 43:Atom

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L1 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L2 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species).str

L3 STRUCTURE UPLOADED

=> que L3 AND L1 NOT L2

L4 QUE L3 AND L1 NOT L2

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L5 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L6 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species).str

L7 STRUCTURE UPLOADED

=> que L7 AND L5 NOT L6

L8 QUE L7 AND L5 NOT L6

=> d l8

L8 HAS NO ANSWERS

L5 SCR 1841

L6 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L7 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L8 QUE L7 AND L5 NOT L6

=> s l8 sss sam

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L9 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L10 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species).str

L11 STRUCTURE UPLOADED

=> que L11 AND L9 NOT L10

L12 QUE L11 AND L9 NOT L10

=> d l12

L12 HAS NO ANSWERS

L9 SCR 1841

L10 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L11 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L12 QUE L11 AND L9 NOT L10

=> s l12 sss sam

SAMPLE SEARCH INITIATED 14:15:39 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 98699 TO ITERATE

1.0% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 0

L13 0 SEA SSS SAM L11 AND L9 NOT L10

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L14 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L15 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species).str

L16 STRUCTURE UPLOADED

=> que L16 AND L14 NOT L15

L17 QUE L16 AND L14 NOT L15

=> d l17

L17 HAS NO ANSWERS

L14 SCR 1841

L15 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L16 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L17 QUE L16 AND L14 NOT L15

=> s l17 sss sam

SAMPLE SEARCH INITIATED 14:17:19 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 98699 TO ITERATE

1.0% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 0

L18 0 SEA SSS SAM L16 AND L14 NOT L15

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L19 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L20 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species).str

L21 STRUCTURE UPLOADED

=> que L21 AND L19 NOT L20

L22 QUE L21 AND L19 NOT L20

=> d l22

L22 HAS NO ANSWERS

L19 SCR 1841

L20 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L21 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L22 QUE L21 AND L19 NOT L20

=> s l22 sss sam

SAMPLE SEARCH INITIATED 14:18:52 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 98699 TO ITERATE

1.0% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L23 0 SEA SSS SAM L21 AND L19 NOT L20

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L24 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L25 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 1).str

L26 STRUCTURE UPLOADED

=> que L26 AND L24 NOT L25

L27 QUE L26 AND L24 NOT L25

=> d l27

L27 HAS NO ANSWERS

L24 SCR 1841

L25 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L26 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L27 QUE L26 AND L24 NOT L25

=> s l27 sss sam

SAMPLE SEARCH INITIATED 14:21:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 96607 TO ITERATE

1.0% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 0

L28 0 SEA SSS SAM L26 AND L24 NOT L25

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L29 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L30 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 1).str

L31 STRUCTURE UPLOADED

=> que L31 AND L29 NOT L30

L32 QUE L31 AND L29 NOT L30

=> d l32

L32 HAS NO ANSWERS

L29 SCR 1841

L30 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L31 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L32 QUE L31 AND L29 NOT L30

=> s 132 sss sam

SAMPLE SEARCH INITIATED 14:25:14 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 113053 TO ITERATE

0.9% PROCESSED 1000 ITERATIONS 1 ANSWERS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
 PROJECTED ITERATIONS: EXCEEDS 1000000
 PROJECTED ANSWERS: EXCEEDS 1624

L33 1 SEA SSS SAM L31 AND L29 NOT L30

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L34 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L35 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 1).str

L36 STRUCTURE UPLOADED

=> que L36 AND L34 NOT L35

L37 QUE L36 AND L34 NOT L35

=> d 137

L37 HAS NO ANSWERS

L34 SCR 1841

L35 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L36 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
 L37 QUE L36 AND L34 NOT L35

=> s 137 sss sam

SAMPLE SEARCH INITIATED 14:27:42 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 113053 TO ITERATE

0.9% PROCESSED 1000 ITERATIONS 0 ANSWERS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
 PROJECTED ITERATIONS: EXCEEDS 1000000
 PROJECTED ANSWERS: EXCEEDS 0

L38 0 SEA SSS SAM L36 AND L34 NOT L35

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L39 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L40 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L41 STRUCTURE UPLOADED

=> que L41 AND L39 NOT L40

L42 QUE L41 AND L39 NOT L40

=> d l42

L42 HAS NO ANSWERS

L39 SCR 1841

L40 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L41 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L42 QUE L41 AND L39 NOT L40

=> s l42 sss sam

SAMPLE SEARCH INITIATED 14:32:28 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 32021 TO ITERATE

3.1% PROCESSED 1000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
 PROJECTED ITERATIONS: 629754 TO 651086
 PROJECTED ANSWERS: 0 TO 0

L43 0 SEA SSS SAM L41 AND L39 NOT L40

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L44 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L45 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L46 STRUCTURE UPLOADED

=> que L46 AND L44 NOT L45

L47 QUE L46 AND L44 NOT L45

=> d l47

L47 HAS NO ANSWERS

L44 SCR 1841

L45 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L46 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L47 QUE L46 AND L44 NOT L45

=> s l47 sss sam

SAMPLE SEARCH INITIATED 14:34:39 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 32021 TO ITERATE

3.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS: 629754 TO 651086

PROJECTED ANSWERS: 0 TO 0

L48 0 SEA SSS SAM L46 AND L44 NOT L45

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L49 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L50 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L51 STRUCTURE UPLOADED

=> que L51 AND L49 NOT L50

L52 QUE L51 AND L49 NOT L50

=> d 152

L52 HAS NO ANSWERS

L49 SCR 1841

L50 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L51 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L52 QUE L51 AND L49 NOT L50

=> s 152 sss sam

SAMPLE SEARCH INITIATED 14:36:43 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 32021 TO ITERATE

3.1% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 629754 TO 651086
PROJECTED ANSWERS: 0 TO 0

L53 0 SEA SSS SAM L51 AND L49 NOT L50

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L54 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L55 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L56 STRUCTURE UPLOADED

=> que L56 AND L54 NOT L55

L57 QUE L56 AND L54 NOT L55

=> d l57

L57 HAS NO ANSWERS

L54 SCR 1841

L55 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L56 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

L57 QUE L56 AND L54 NOT L55

=> s l57 sss sam

SAMPLE SEARCH INITIATED 14:38:27 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 15451 TO ITERATE

6.5% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

3 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 301586 TO 316454

PROJECTED ANSWERS: 519 TO 1335

L58 3 SEA SSS SAM L56 AND L54 NOT L55

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L64 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L65 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L66 STRUCTURE UPLOADED

=> que L66 AND L64 NOT L65

L67 QUE L66 AND L64 NOT L65

=> d l67

L67 HAS NO ANSWERS

L64 SCR 1841

L65 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L66 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.
 L67 QUE L66 AND L64 NOT L65

=> s l67 sss sam
 SAMPLE SEARCH INITIATED 14:43:40 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 15451 TO ITERATE

6.5% PROCESSED 1000 ITERATIONS 0 ANSWERS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 301586 TO 316454
 PROJECTED ANSWERS: 0 TO 0

L68 0 SEA SSS SAM L66 AND L64 NOT L65

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L69 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L70 SCREEN CREATED

=>
 Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L71 STRUCTURE UPLOADED

=> que L71 AND L69 NOT L70

L72 QUE L71 AND L69 NOT L70

=> d l72
 L72 HAS NO ANSWERS
 L69 SCR 1841
 L70 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L71 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
 L72 QUE L71 AND L69 NOT L70

=> s l72 sss sam
 SAMPLE SEARCH INITIATED 14:50:52 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 113053 TO ITERATE

0.9% PROCESSED 1000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
 PROJECTED ITERATIONS: EXCEEDS 1000000
 PROJECTED ANSWERS: EXCEEDS 0

L73 0 SEA SSS SAM L71 AND L69 NOT L70

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L74 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L75 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L76 STRUCTURE UPLOADED

=> que L76 AND L74 NOT L75

L77 QUE L76 AND L74 NOT L75

=> d l77

L77 HAS NO ANSWERS

L74 SCR 1841

L75 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L76 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L77 QUE L76 AND L74 NOT L75

=> s l77 sss sam

SAMPLE SEARCH INITIATED 14:52:16 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 113053 TO ITERATE

0.9% PROCESSED 1000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **INCOMPLETE**
 PROJECTED ITERATIONS: EXCEEDS 1000000
 PROJECTED ANSWERS: EXCEEDS 0

L78 0 SEA SSS SAM L76 AND L74 NOT L75

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L79 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L80 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L81 STRUCTURE UPLOADED

=> que L81 AND L79 NOT L80

L82 QUE L81 AND L79 NOT L80

=> d l82

L82 HAS NO ANSWERS

L79 SCR 1841

L80 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L81 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L82 QUE L81 AND L79 NOT L80

=> s l82 sss sam

SAMPLE SEARCH INITIATED 14:53:18 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 48164 TO ITERATE

2.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS: 950242 TO 976318

PROJECTED ANSWERS: 0 TO 0

L83 0 SEA SSS SAM L81 AND L79 NOT L80

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L84 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L85 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L86 STRUCTURE UPLOADED

=> que L86 AND L84 NOT L85

L87 QUE L86 AND L84 NOT L85

=> d l87

L87 HAS NO ANSWERS

L84 SCR 1841

L85 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L86 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L87 QUE L86 AND L84 NOT L85

=> s l87 sss sam

SAMPLE SEARCH INITIATED 14:54:39 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19745 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 386503 TO 403297

PROJECTED ANSWERS: 0 TO 0

L88 0 SEA SSS SAM L86 AND L84 NOT L85

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1841

L89 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L90 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\09943420 (species 2).str

L91 STRUCTURE UPLOADED

=> que L91 AND L89 NOT L90

L92 QUE L91 AND L89 NOT L90

=> d 192

L92 HAS NO ANSWERS

L89 SCR 1841

L90 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L91 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L92 QUE L91 AND L89 NOT L90

=> s 192 sss sam

SAMPLE SEARCH INITIATED 14:56:26 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19745 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 386503 TO 403297

PROJECTED ANSWERS: 0 TO 0

L93 0 SEA SSS SAM L91 AND L89 NOT L90

=> s 192 sss ful

SEARCH FAILED DUE TO A STRUCTURE QUERY ERROR

The structure query could not be searched. Please review and revise your structure query, especially checking the variable definitions and attachments. In rare instances the failure may be due to a system problem. Please contact your local STN Help Desk if you need assistance.

=> s 192 sss ful

FULL SEARCH INITIATED 14:56:48 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 396169 TO ITERATE

100.0% PROCESSED 396169 ITERATIONS
SEARCH TIME: 00.00.11

48 ANSWERS

L94 48 SEA SSS FUL L91 AND L89 NOT L90

=> s 194

L95 17 L94

=> d 195 1-17 bib,ab,hitstr

L95 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 2002:171852 CAPLUS

DN 136:216528

TI Preparation of linked benzene derivatives as sodium channel modulators

IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel; Turner, S. Derek

PA Advanced Medicine, Inc., USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001086965	A5	20020313	AU 2001-86965	20010830
---------------	----	----------	---------------	----------

US 2003027822	A1	20030206	US 2001-943420	20010830
---------------	----	----------	----------------	----------

PRAI US 2000-229572P	P	20000831		
----------------------	---	----------	--	--

WO 2001-US27128	W	20010830		
-----------------	---	----------	--	--

OS MARPAT 136:216528

AB Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NRm wherein Rm = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)m, (CR5R6)w, O(CR5R6)rO, N(Rk) where m = 0-2, w = 1-3, r = 2-3; Rk = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC50 value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).

IT 402759-58-4P 402759-62-0P 402759-66-4P

402759-68-6P 402759-69-7P 402759-70-0P

402759-71-1P 402760-05-8P 402761-04-0P

← Applicant's

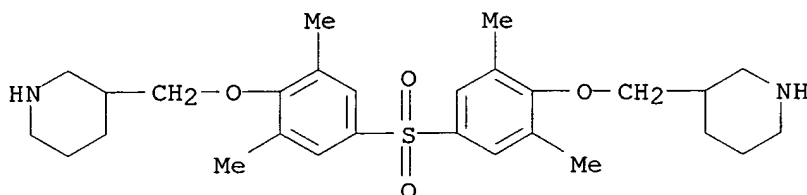
402761-07-3P 402761-08-4P 402761-10-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

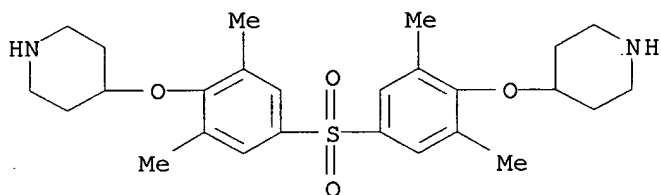
RN 402759-58-4 CAPLUS

CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



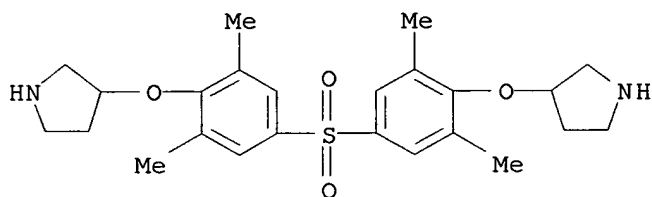
RN 402759-62-0 CAPLUS

CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



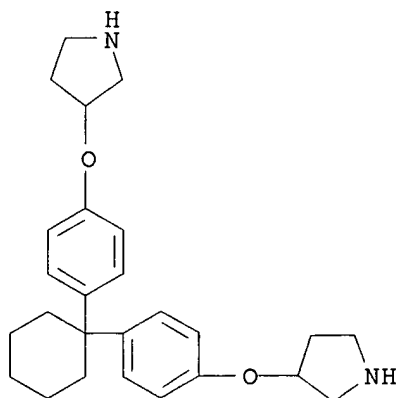
RN 402759-66-4 CAPLUS

CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



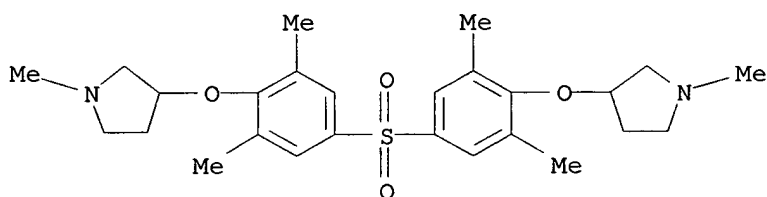
RN 402759-68-6 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



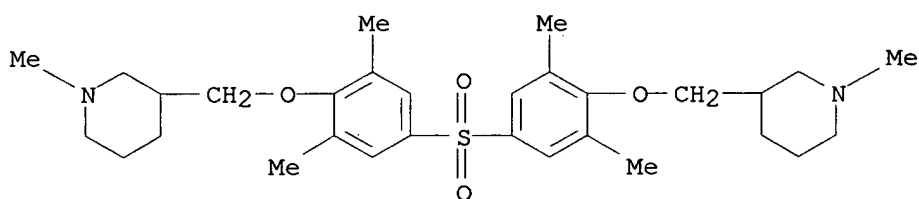
RN 402759-69-7 CAPLUS

CN Pyrrolidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



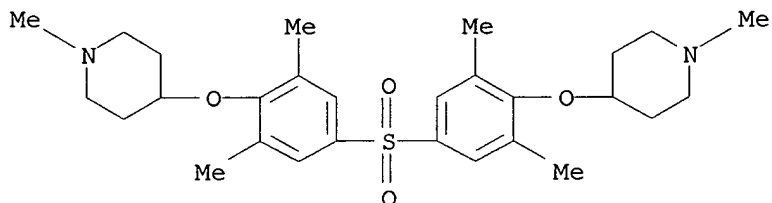
RN 402759-70-0 CAPLUS

CN Piperidine, 3,3'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)

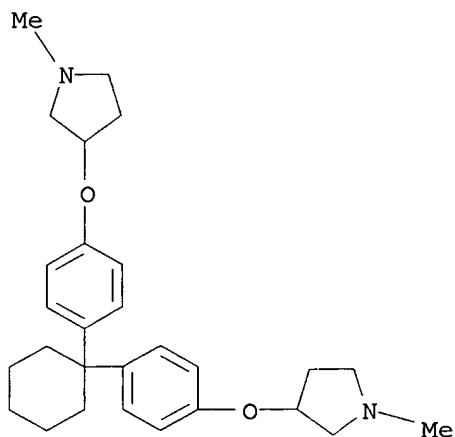


RN 402759-71-1 CAPLUS

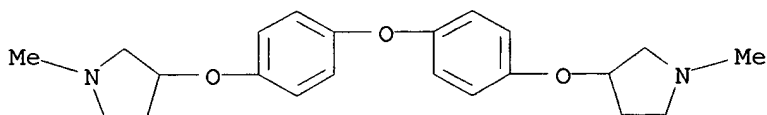
CN Piperidine, 4,4'-[sulfonylbis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



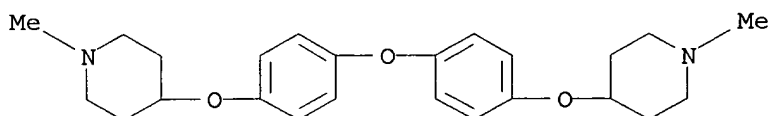
RN 402760-05-8 CAPLUS
 CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



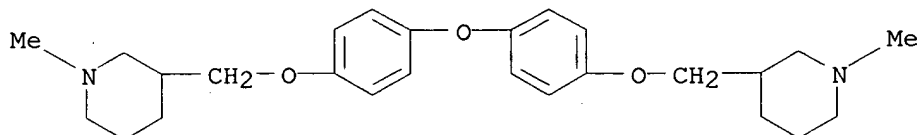
RN 402761-04-0 CAPLUS
 CN Pyrrolidine, 3,3'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402761-07-3 CAPLUS
 CN Piperidine, 4,4'-[oxybis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)

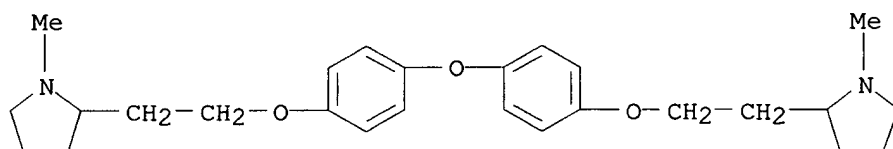


RN 402761-08-4 CAPLUS
 CN Piperidine, 3,3'-[oxybis(4,1-phenyleneoxymethylene)]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402761-10-8 CAPLUS

CN Pyrrolidine, 2,2'-[oxybis(4,1-phenyleneoxy-2,1-ethanediyl)]bis[1-methyl-
(9CI) (CA INDEX NAME)



L95 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 2001:764338 CAPLUS

DN 136:54329

TI Molecular dynamics simulation of glass transition behavior of polyimide ensemble

AU Liang, Tai Ning; Zhang, Xiang Yu; Yang, Xiao Zhen

CS Institute of Chemistry & Engineering, Heilongjiang University, Harbin, 150089, Peop. Rep. China

SO Chinese Chemical Letters (2001), 12(9), 827-828
CODEN: CCLEE7; ISSN: 1001-8417

PB Chinese Chemical Society

DT Journal

LA English

AB The effect of chromophores to the glass transition temp. of polyimide ensemble has been investigated by means of mol. dynamics simulation in conjunction with barrier anal. Simulated Tg results indicated a good agreement with exptl. value. This study showed the MD simulation could est. the effect of chromophores to the Tg of polyimide ensemble conveniently and an estn. approach method had a surprising deviation of Tg from expt. At the same time, a polyimide structure with higher barrier energy was designed and validated by MD simulation.

IT 374569-04-7

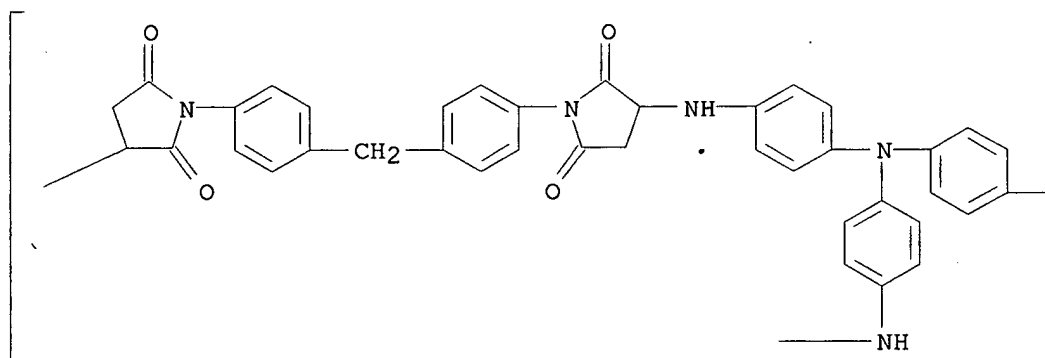
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

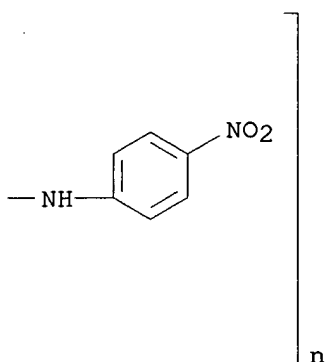
(mol. dynamics simulation of glass transition behavior of polyimide ensemble)

RN 374569-04-7 CAPLUS

CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylene[[4-[(4-nitrophenyl)amino]phenyl]imino]-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A





RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 2001:670060 CAPLUS

DN 135:372217

TI Prediction of polyimide materials with high glass-transition temperatures

AU Liang, Taining; Yang, Xiaozhen; Zhang, Xiangyu

CS Polymer Physics Laboratory, Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China

SO Journal of Polymer Science, Part B: Polymer Physics (2001), 39(19), 2243-2251

CODEN: JPBPEM; ISSN: 0887-6266

PB John Wiley & Sons, Inc.

DT Journal

LA English

AB The prediction of chem. structures that possess higher glass-transition temps. (Tg's) is crucial for designing polyimides. Because of a lack of suitable parameters, several estn. methods cannot be used for this purpose. Therefore, the authors used mol. dynamic simulation with the DREIDING II force field to predict Tg's for polyimides. Simulated results indicated a good agreement with exptl. observations. A barrier anal. of the bridging bonds between moieties along the main-chain backbone showed a correlation between Tg and the barrier height. This proved to be helpful in a preliminary selection before the mol. dynamic simulation for accelerating the process of research and development on new polyimides.

IT 374569-04-7

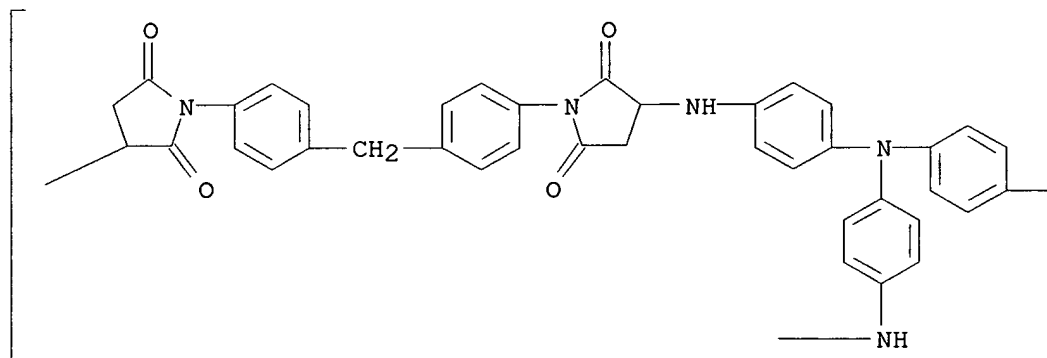
RL: PRP (Properties)

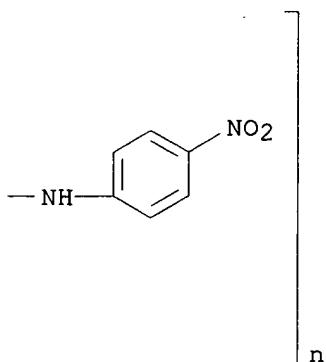
(prediction of chem. structures of polyimide materials with high glass transition temps.)

RN 374569-04-7 CAPLUS

CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylene[[4-[(4-nitrophenyl)amino]phenyl]imino]-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A





RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1999:562117 CAPLUS
 DN 131:351977
 TI Colorless and Soluble Strictly Alternating Copolyimides Containing
 Aliphatic Spiro Units from 2,8-Dioxaspiro[4.5]decane-1,3,7,9-tetrone
 AU Kato, Jun; Seo, Atsushi; Shiraishi, Shinsaku
 CS Institute of Industrial Science, The University of Tokyo, Minato-ku Tokyo,
 106-8558, Japan
 SO Macromolecules (1999), 32(20), 6400-6406
 CODEN: MAMOBX; ISSN: 0024-9297
 PB American Chemical Society
 DT Journal
 LA English
 AB Strictly alternating copolyimides contg. aliph. spiro units were prepd.
 via diimide (with five-membered rings)-dianhydrides (with six-membered
 rings) derived from 2,8-dioxaspiro[4.5]decane-1,3,7,9-tetrone (TCDA) and
 diamines. The polymn. was conducted by the conventional two-step
 procedure using the diimide-dianhydrides and diamines. The resulting
 poly(imide-imide)s have alternating diamine components and also a
 head-to-head (tail-to-tail) structure in the imide ring sequence. The
 poly(imide-imide) films exhibited excellent colorlessness (cutoff
 wavelength) and transparency (UV-visible transmittance). Most of the
 poly(imide-imide)s were sol. in typical polar aprotic solvents such as
 N,N-dimethylacetamide (DMAc) and also in m-cresol, except for the wholly
 aliph. ones. These poly(imide-imides) had decompn. temps. between 379 and
 419 .degree.C in a nitrogen atm., and the glass transition temps. were
 shown to be in the wide range of 197-315 .degree.C depending on the
 combination of the two kinds of diamines.
 IT **250604-88-7P 250604-91-2P 250605-09-5P**
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and characterization of colorless and sol.)
 RN 250604-88-7 CAPLUS
 CN Poly[[3-(carboxymethyl)-2,5-dioxo-3,1-pyrrolidinediyl]-1,4-phenyleneoxy-
 1,4-phenylene[3-(carboxymethyl)-2,5-dioxo-1,3-pyrrolidinediyl](2-oxo-1,2-
 ethanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1-oxo-1,2-
 ethanediyl)] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 250604-91-2 CAPLUS
 CN Poly[[3-(carboxymethyl)-2,5-dioxo-3,1-pyrrolidinediyl]-1,4-phenyleneoxy-
 1,4-phenylene[3-(carboxymethyl)-2,5-dioxo-1,3-pyrrolidinediyl](2-oxo-1,2-
 ethanediyl)imino-1,4-phenylenesulfonyl-1,4-phenyleneimino(1-oxo-1,2-
 ethanediyl)] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 250605-09-5 CAPLUS

CN Poly[[3-(carboxymethyl)-2,5-dioxo-3,1-pyrrolidinediyl]-1,4-phenylenemethylene-1,4-phenylene[3-(carboxymethyl)-2,5-dioxo-1,3-pyrrolidinediyl](2-oxo-1,2-ethanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1-oxo-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 1991:228551 CAPLUS

DN 114:228551

TI Preparation of (phenylthiophenyl)amidine derivatives as immunomodulators

PA American Cyanamid Co., USA

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02022261	A2	19900125	JP 1989-124638	19890519
PRAI	US 1988-195930		19880519		
	US 1989-341861		19890425		

OS MARPAT 114:228551

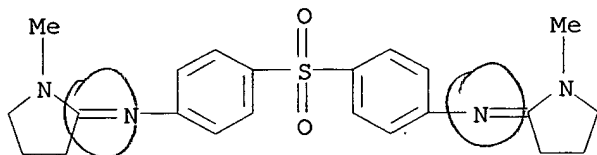
AB The title compds [I; m = 0, 1, 2; R = H, NH₂, halo, N:CR₁NR₂R₃; R₁ = H, C1-4 alkyl, pyridyl, (substituted) Ph, thienyl; R₂ = H, C1-4 alkyl; R₃ = H, C1-4 alkyl, Ph, Me₂NC₆H₄; R₁R₂ = (CH₂)₂₋₄; R₂R₃N = pyrrolidino, piperidino, morpholino; with privisions] are prepd. POC13 was added to a soln. of 21.4 g PrCONEt₂ in MeCN at 5-10.degree. with stirring, 14.4 g (p-H₂NC₆H₄)₂SO₂ was added with stirring at room temp., and the mixt. was heated at 60.degree. to give 24.2 g I [R = 4-(Et₂NCPr:N), R₁ = Pr, R₂ = R₃ = Et at 4-position, m = 2], which was effective in activating tumor-destroying macrophage. Also prepd. and tested for immunomodulating activities were 40 addnl. I.

IT **129346-60-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as immunomodulator)

RN 129346-60-7 CAPLUS

CN Benzenamine, 4,4'-sulfonylbis[N-(1-methyl-2-pyrrolidinylidene)- (9CI) (CA INDEX NAME)



L95 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 1990:531762 CAPLUS

DN 113:131762

TI Preparation of amidines of diphenyl sulfone derivatives as immunomodulators

IN Lin, Yang I.; Wang, Bosco Shang; Ruszala-Mallon, Veronica M.; Bitha, Panayota; Fields, Thomas Lynn

PA American Cyanamid Co., USA

SO Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 354303	A1	19900214	EP 1989-107998	19890503
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	DK 8902422	A	19891120	DK 1989-2422	19890518
	NO 8901986	A	19891120	NO 1989-1986	19890518
	FI 8902397	A	19891120	FI 1989-2397	19890518
	AU 8934905	A1	19891123	AU 1989-34905	19890518
	AU 604607	B2	19901220		
	ZA 8903737	A	19900131	ZA 1989-3737	19890518
	HU 53355	A2	19901028	HU 1989-2487	19890518
	HU 203321	B	19910729		
	DD 289521	A5	19910502	DD 1989-328703	19890518
PRAI	US 1988-195930		19880519		

OS MARPAT 113:131762

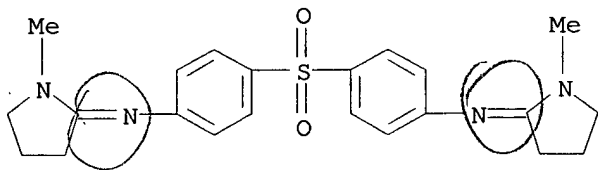
AB The title amidines [I; R = H, halo, NH₂, N:CR₁NR₂R₃ wherein R₁ = H, C1-4 alkyl, pyridyl, thienyl, (halo- or CF₃-substituted) Ph; R₂ = H, C1-4 alkyl; R₃ = H, C1-4 alkyl, Me₂NC₆N₄, etc., with limitations; m = 0-2] and their salts, useful as immunomodulators, are prepd. POC13 (18.4 g) was added to a soln. of 21.4 g PrCONEt₂ in MeCN at 5-10.degree., the mixt. was stirred at room temp., treated with 12.4 g (H₂NC₆H₄)₂SO₂ with stirring at room temp. and 60.degree. to give 24.2 g 4,4'-I (R = Et₂NCPr:N, R₁ = Pr, R₂ = R₃ = Et, m = 2), which showed 59.5% in vitro activation of tumoricidal macrophages. Also prepd. were 40 addnl. I. Other immunomodulating and antitumor assays were also given.

IT 129346-60-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as immunomodulator and antitumor agent)

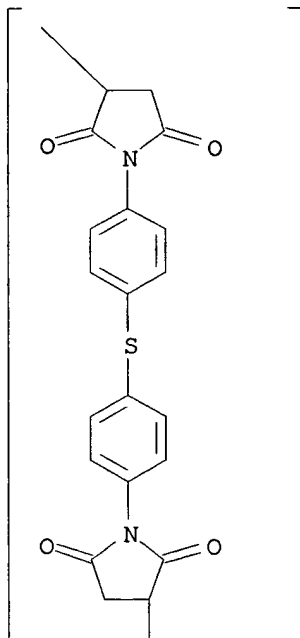
RN 129346-60-7 CAPLUS

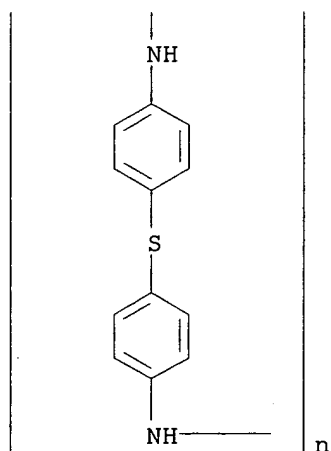
CN Benzenamine, 4,4'-sulfonylbis[N-(1-methyl-2-pyrrolidinylidene)- (9CI) (CA INDEX NAME)



L95 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1984:631122 CAPLUS
 DN 101:231122
 TI Synthesis and properties of thermosetting polyaminomaleimides
 AU Sergeev, V. A.; Nedel'kin, V. I.; Yuferov, E. A.; Erzh, B. V.; Komarova, L. I.; Bakhmutov, V. I.; Tsyryapkin, V. A.
 CS Inst. Elementoorg. Soedin., Moscow, USSR
 SO Vysokomolekulyarnye Soedineniya, Seriya A (1984), 26(9), 1936-43
 CODEN: VYSAAF; ISSN: 0507-5475
 DT Journal
 LA Russian
 AB The title polymers were obtained by addn. of (p-H₂NC₆H₄)₂S to N,N'-(thiodi-4,1-phenylene)bis[maleimide] and of (p-H₂NC₆H₄)₂CH₂ to N,N'-(methylenedi-4,1-phenylene)bis[maleimide]. The former reaction was conducted in dioxane soln. or in melt, and the latter in melt. High-melting cryst. polymers were attained in solns., and amorphous oligomers were formed in melt. Regardless of the comonomer ratio, all polymers were thermosetting. Their crosslinking proceeded via reactions of the C:C bonds of the maleimide group, as well as ring cleavage of the succinimide groups with formation of amides.
 IT **93345-38-1P**
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and structure and properties of)
 RN 93345-38-1 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenethio-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylenethio-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

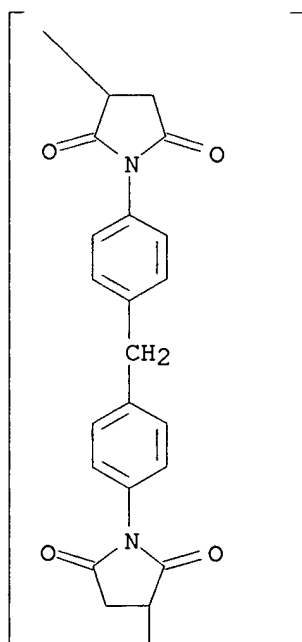
PAGE 1-A



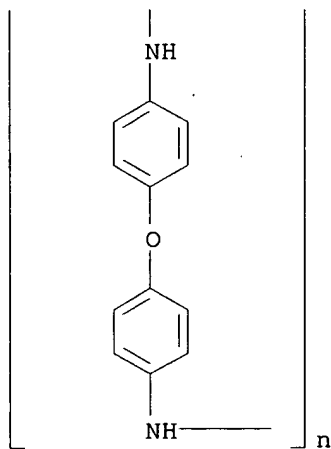


L95 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1982:69820 CAPLUS
 DN 96:69820
 TI Structure and mechanical properties of polybis(maleimideamines)
 AU Volkov, V. S.; Korotkii, A. F.; Dolmatov, S. A.; Levshanov, V. S.
 CS USSR
 SO Plasticheskie Massy (1981), (12), 14-15
 CODEN: PLMSAI; ISSN: 0554-2901
 DT Journal
 LA Russian
 AB Mech. properties. of N,N'-(methylenedi-p-phenylene)dimaleimide(I) polymers with arom. diamines are examd. as a function of the nature and size of the element or group between the 2 benzene rings and the substituent in the ortho position to the amino group of the diamine. The flexural strength and elasticity modulus and impact strength of the I polymers with diamines increased through the diamine series: 4,4'-oxydianiline, 4,4'-methylenedianiline and 4,4'-sulfonyldianiline. An increase in flexural strength and elasticity modulus and a decrease in impact strength was obsd. for the I polymers with substituent-contg. diamines through the substituent series: H, Cl and OMe. A linear stress-strain dependence was obsd. for all copolymers irresp. of their chem. structure. A correlation was obsd. between the increase in the molar vol. of the element or group between the benzene rings of the diamine mols. and the decrease of flexural strength, elasticity modulus and impact strength of the bismaleimide copolymer.
 IT **35064-38-1 35064-39-2**
 RL: PRP (Properties)
 (mech. properties of)
 RN 35064-38-1 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A

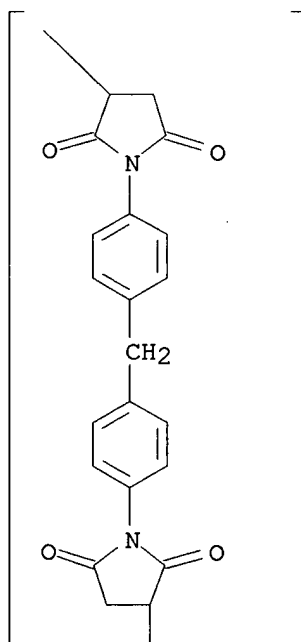


PAGE 2-A

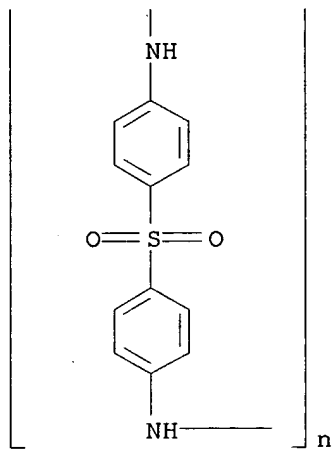


RN 35064-39-2 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylenesulfonyl-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

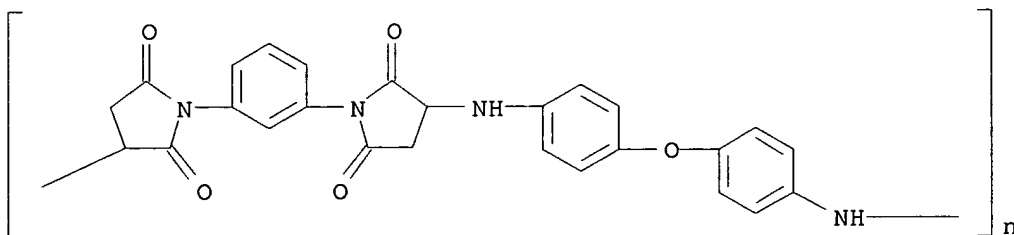
PAGE 1-A



PAGE 2-A



L95 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1981:444024 CAPLUS
 DN 95:44024
 TI Electrostatic characteristics of self-lubricating materials made of
 poly(bismaleimidamines)
 AU Mukhamedzhanov, A. B.; Chegodaev, P. P.; Kandybko, A. M.; Kotukhova, A. M.
 CS USSR
 SO Plasticheskie Massy (1981), (5), 32-4
 CODEN: PLMSAI; ISSN: 0554-2901
 DT Journal
 LA Russian
 AB There is a relation between the electrostatic properties and structure of
 filled 4,4'-oxydianiline-N,N'-m-phenylenedimaleimide copolymer (I)
 [26140-68-1] which cannot be predicted from the elec. properties of I and
 the filler. Properties are optimum for MoS₂-filled I. The rate of
 surface potential drop at a given time expressed as the effective rate
 const. had an extreme dependence on filler content for I filled with F 4
 [37332-02-8] and graphite. The activation energy of charge decrease was
 22-105 kcal/mol, depending on compn., and was highest for graphite-filled
 I despite the lower activation energy of elec. cond. of the filler (8
 kcal/mol). The neg. potential was higher than the pos. potential for all
 compns., and the difference between them was const. at all temps.
 IT **78244-69-6**
 RL: USES (Uses)
 (electrostatic properties of, filler effect on)
 RN 78244-69-6 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,3-phenylene(2,5-dioxo-1,3-
 pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA
 INDEX NAME)



L95 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 1980:111338 CAPLUS

DN 92:111338

TI Studies of phosphorus-containing polymers. XIX. Preparation of phosphorus-containing polysuccinimide-amines

AU Kondo, Hitoshi; Sato, Moriyuki; Yokoyama, Masaaki

CS Dep. Ind. Chem., Kogakuin Univ., Tokyo, 160, Japan

SO Kobunshi Ronbunshu (1979), 36(12), 803-8

CODEN: KBRBA3; ISSN: 0386-2186

DT Journal

LA Japanese

AB Bis(3-maleimidophenyl)alkylphosphine oxides and bis(maleimido)benzophenones were prepd. by reaction of bis(3-aminophenyl)alkylphosphine oxides and diaminobenzophenones, resp., with maleic anhydride [108-31-6] and then polymd. with 4 arom. diamines to give self-extinguishing polymers in .apprx.70% yields and with reduced viscosity (0.2 g/dL soln. in AcNMe₂, 30.degree.) 0.16-0.34. Most of polymers were sol. in dipolar aprotic solvents, and the polymer solns. in H₂SO₄ showed gradual decrease in reduced viscosity. The polymers had poor thermal stability compared with P-contg. poly(amide imides) and poly(ester imides).

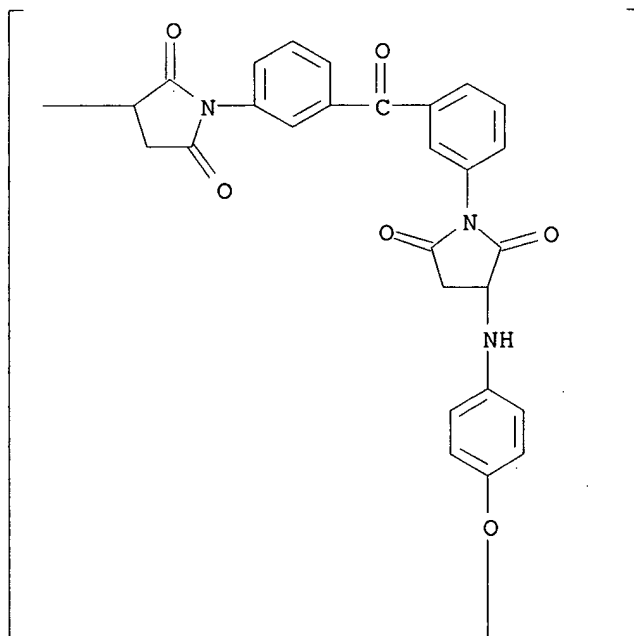
IT 72923-34-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of fire-resistant)

RN 72923-34-3 CAPLUS

CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,3-phenylenecarbonyl-1,3-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

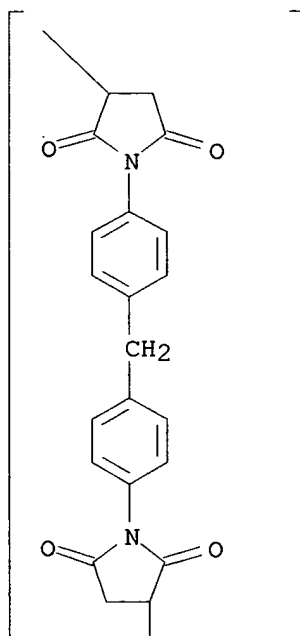
PAGE 1-A

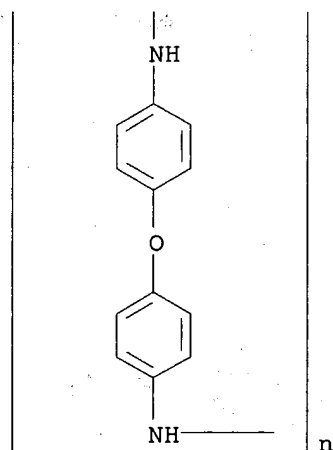




L95 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:58153 CAPLUS
 DN 82:58153
 TI Polyaspartimides
 AU Crivello, J. V.
 CS Gen. Electr. Corp. Res. Dev., Schenectady, NY, USA
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1973), 14(1), 294-9
 CODEN: ACPPAY; ISSN: 0032-3934
 DT Journal
 LA English
 AB Polyaspartimides (such as 4,4'-methylenedianiline-N,N'-(methylenedi-p-phenylene)bismaleimide copolymer (I) [26140-67-0], etc.) were prepd. by addn. polymn. of bismaleimides with arom. diamines in the presence of AcOH [64-19-7] at 100-110.degree. by Michael condensation, and characterized by ir and NMR spectroscopy, and thermogravimetric anal.
 IT **35064-38-1P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 35064-38-1 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A





L95 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2003 ACS

AN 1973:466854 CAPLUS

DN 79:66854

TI Polyaspartimides. Condensation of aromatic diamines and bismaleimide compounds

AU Crivello, James V.

CS Corp. Res. Dev., Electr. Co., Schenectady, NY, USA

SO Journal of Polymer Science, Polymer Chemistry Edition (1973), 11(6), 1185-200

CODEN: JPLCAT; ISSN: 0449-296X

DT Journal

LA English

AB The reaction of n-phenylmaleimide [941-69-5] and aniline [62-53-3] was studied and used as a model system for the prepn. of high mol. wt. polymers from bismaleimides and aromatic diamines. Weak Broensted acids have a marked catalytic effect on the reaction and a no. of model aspartimides (I, R = Ph, p-C₆H₄CH₂C₆H₄-p; R₁ = Ph, p-ClC₆H₄, p-C₆H₄, p-C₆H₄CH₂C₆H₄-p; R₂ = H, Me; m = 1,2) were prepd. using HOAc as a reaction medium. Bismaleimides (II, Q = p-C₆H₄CH₂C₆H₄-p, p-C₆H₄OC₆H₄-p, p-C₆H₄) were prepd. and condensed with p-H₂NC₆H₄CH₂C₆H₄NH₂-p, m-C₆H₄(NH₂)₂, p-C₆H₄(NH₂)₂, and p-H₂NC₆H₄OC₆H₄NH₂-p in cresol contg. a small amt of protonic acid to give polyaspartamides (III, Q₁ = m- and p-C₆H₄, p-C₆H₄OC₆H₄-p, p-C₆H₄CH₂C₆H₄-p). III have limited thermal stability but exhibit good processing characteristics.

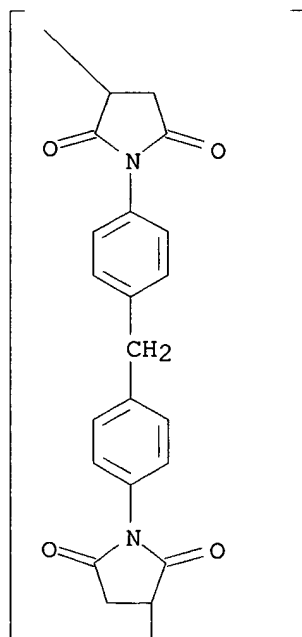
IT 35064-38-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and properties of)

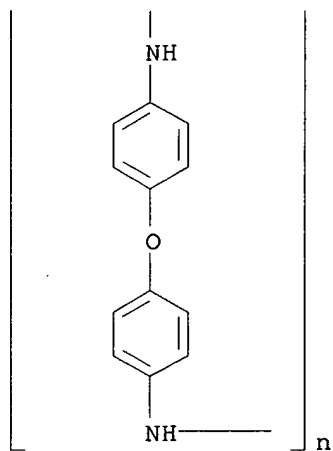
RN 35064-38-1 CAPLUS

CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A

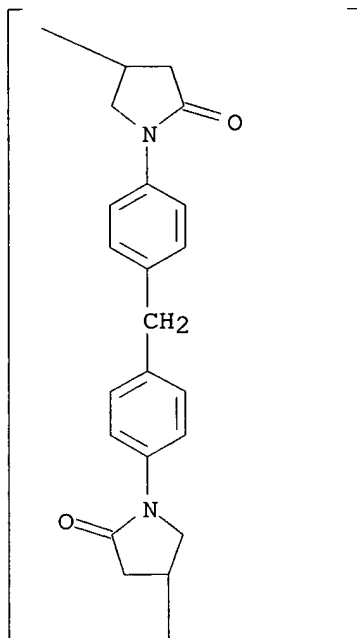


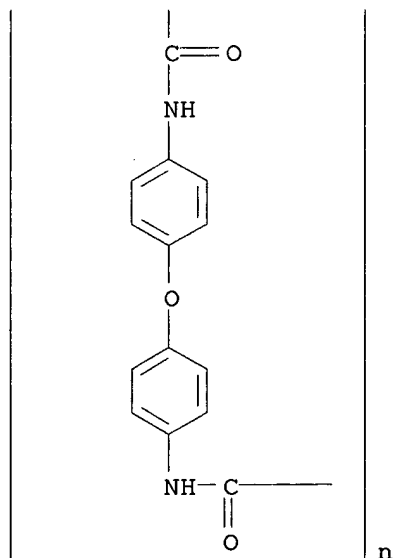
PAGE 2-A



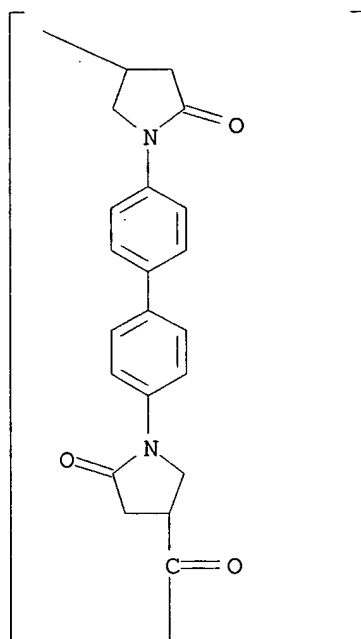
L95 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1973:58850 CAPLUS
 DN 78:58850
 TI Thermally stable polymers derived from itaconic acid
 AU Avny, Yair; Saghian, Nasser; Zilkha, Albert
 CS Dep. Org. Chem., Hebrew Univ., Jerusalem, Israel
 SO Israel Journal of Chemistry (1972), 10(5), 949-57
 CODEN: ISJCAT; ISSN: 0021-2148
 DT Journal
 LA English
 AB Pyrrolidone dicarboxylic acids [I, II, and III (X = covalent bond, SO₂, or CH₂)] were prepd. by treatment of itaconic acid [97-65-4] with p-aminobenzoic acid, p-C₆H₄(NH₂)₂, or (p-H₂NC₆H₄)₂X and were polycondensed with p-C₆H₄(NH₂)₂ or (p-H₂NC₆H₄)₂X as melts or in soln. as mixed anhydrides to give polyamides which were stable at .leq.400.deg.. II and III (X = covalent bond, SO₂, or CH₂) were melt polycondensed with 3,3'-diaminobenzidine [91-95-2] to give polybenzimidazoles which were stable at .leq.500.deg.. All the polymers were sol. in H₂SO₄ and some of them were also partially sol. in DMF or Me₂SO.
 IT **40403-80-3P 40404-02-2P 40404-06-6P**
40404-11-3P 40404-12-4P 40404-16-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 40403-80-3 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

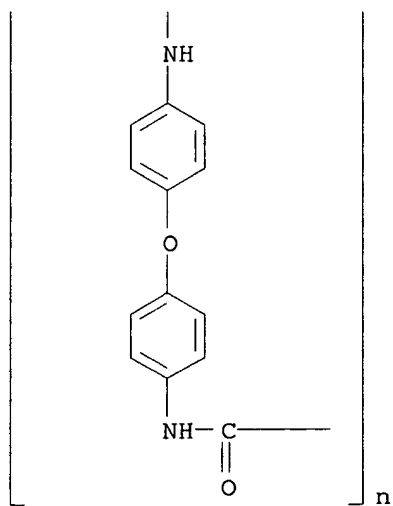




RN 40404-02-2 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)[1,1'-biphenyl]-4,4'-diyl(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl]
 (9CI) (CA INDEX NAME)

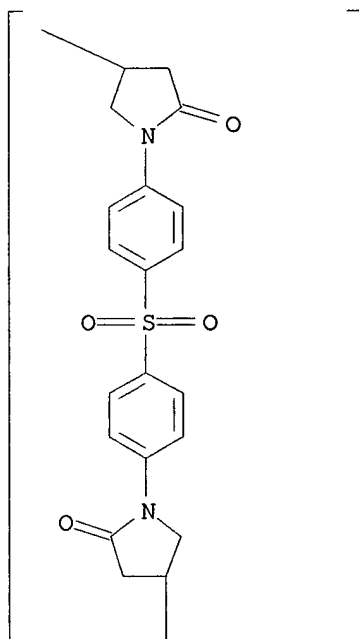


PAGE 2-A

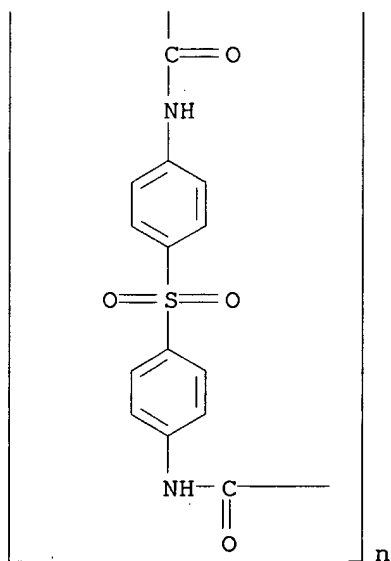


RN 40404-06-6 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)-1,4-phenylenesulfonyl-1,4-phenylene(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenylenesulfonyl-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

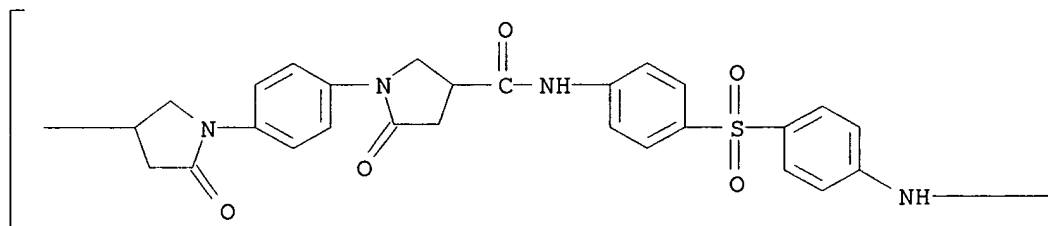


PAGE 2-A

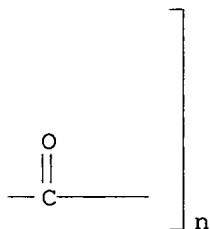


RN 40404-11-3 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)-1,4-phenylene(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenylenesulfonyl-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

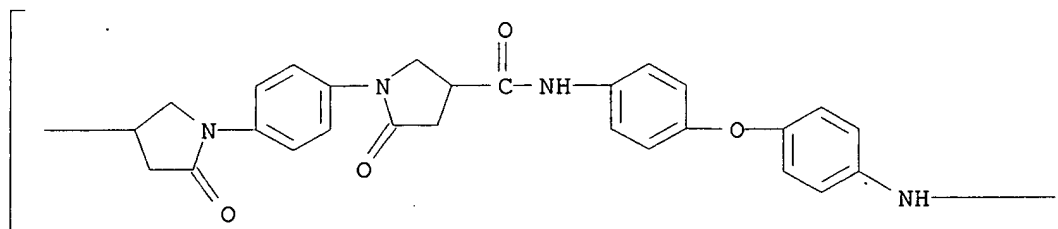


PAGE 1-B

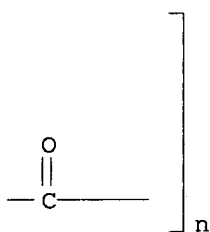


RN 40404-12-4 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)-1,4-phenylene(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

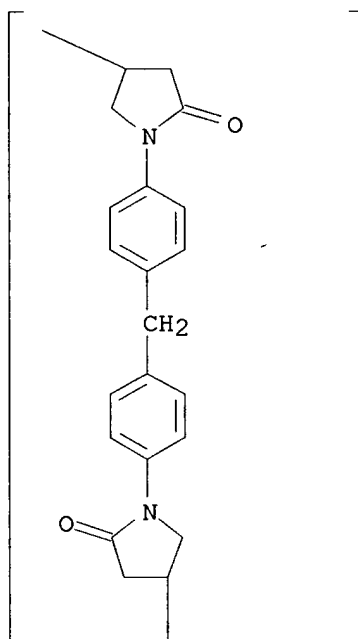


PAGE 1-B

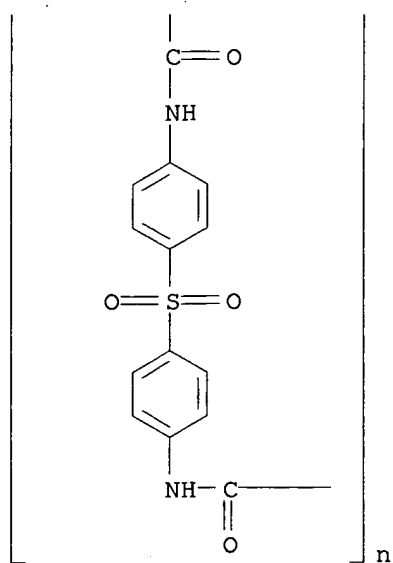


RN 40404-16-8 CAPLUS
 CN Poly[(5-oxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(5-oxo-1,3-pyrrolidinediyl)carbonylimino-1,4-phenylenesulfonyl-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



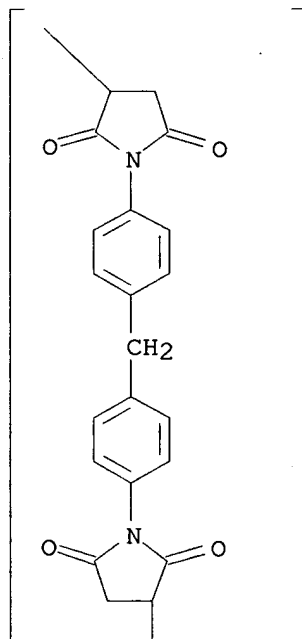
PAGE 2-A



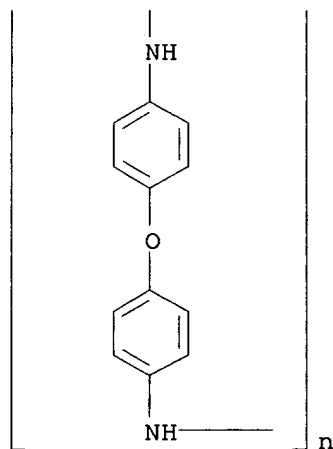
L95 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS
 AN 1972:60290 CAPLUS
 DN 76:60290
 TI Polyimides from bismaleimides
 IN Crivello, James V.
 PA General Electric Co.
 SO Ger. Offen., 13 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2113063		19711007		
PRAI	US		19700327		
AB	The polyimides I, where Q = e.g., p-C ₆ H ₄ , (p-C ₆ H ₄) ₂ O, (p-C ₆ H ₄) ₂ CH ₂ (II), or (p-C ₆ H ₄) ₂ SO ₂ , suitable for the manuf. of, e.g., automobile parts or laminates, were prepd. by reaction of aromatic diamines with N,N'-(methylenedi-p-phenylene)dimalimide (III) in the presence of an acid, e.g. HOAc or CF ₃ CO ₂ H. Thus, refluxing III 43, (p-H ₂ NC ₆ H ₄) ₂ CH ₂ 12, and HOAc 600 parts 2 hr gave 54.3 parts II. Equal parts of glass fibers and II contg. 5% dicumyl peroxide were molded 5 min at 250.deg. under pressure to give rods of high modulus and flexural strength.				
IT	35064-38-1P 35064-39-2P RL: PREP (Preparation) (prepn. of)				
RN	35064-38-1 CAPLUS				
CN	Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino] (9CI) (CA INDEX NAME)				

PAGE 1-A

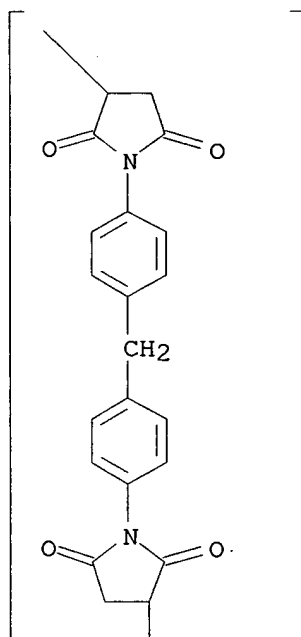


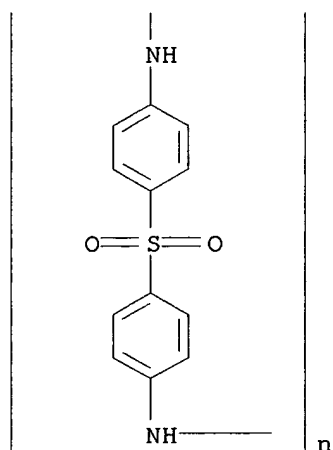
PAGE 2-A



RN 35064-39-2 CAPLUS
 CN Poly[(2,5-dioxo-3,1-pyrrolidinediyl)-1,4-phenylenemethylene-1,4-phenylene(2,5-dioxo-1,3-pyrrolidinediyl)imino-1,4-phenylenesulfonyl-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

PAGE 1-A





=> d his

(FILE 'HOME' ENTERED AT 14:11:54 ON 14 MAY 2003)

FILE 'REGISTRY' ENTERED AT 14:12:00 ON 14 MAY 2003

```

L1      SCREEN 1841
L2      SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L3      STRUCTURE UPLOADED
L4      QUE L3 AND L1 NOT L2
L5      SCREEN 1841
L6      SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L7      STRUCTURE UPLOADED
L8      QUE L7 AND L5 NOT L6
L9      SCREEN 1841
L10     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L11     STRUCTURE UPLOADED
L12     QUE L11 AND L9 NOT L10
L13     0 S L12 SSS SAM
L14     SCREEN 1841
L15     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L16     STRUCTURE UPLOADED
L17     QUE L16 AND L14 NOT L15
L18     0 S L17 SSS SAM
L19     SCREEN 1841
L20     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L21     STRUCTURE UPLOADED
L22     QUE L21 AND L19 NOT L20
L23     0 S L22 SSS SAM
L24     SCREEN 1841
L25     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L26     STRUCTURE UPLOADED
L27     QUE L26 AND L24 NOT L25
L28     0 S L27 SSS SAM
L29     SCREEN 1841
L30     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L31     STRUCTURE UPLOADED
L32     QUE L31 AND L29 NOT L30
L33     1 S L32 SSS SAM
L34     SCREEN 1841
L35     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L36     STRUCTURE UPLOADED
L37     QUE L36 AND L34 NOT L35
L38     0 S L37 SSS SAM
L39     SCREEN 1841
L40     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L41     STRUCTURE UPLOADED
L42     QUE L41 AND L39 NOT L40
L43     0 S L42 SSS SAM
L44     SCREEN 1841
L45     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L46     STRUCTURE UPLOADED
L47     QUE L46 AND L44 NOT L45
L48     0 S L47 SSS SAM
L49     SCREEN 1841
L50     SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
L51     STRUCTURE UPLOADED
L52     QUE L51 AND L49 NOT L50
L53     0 S L52 SSS SAM

```

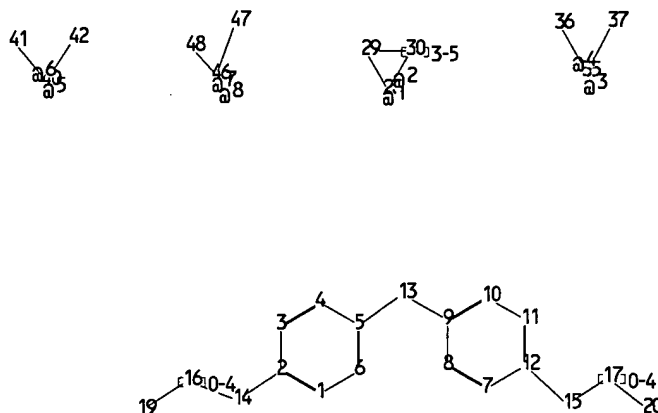
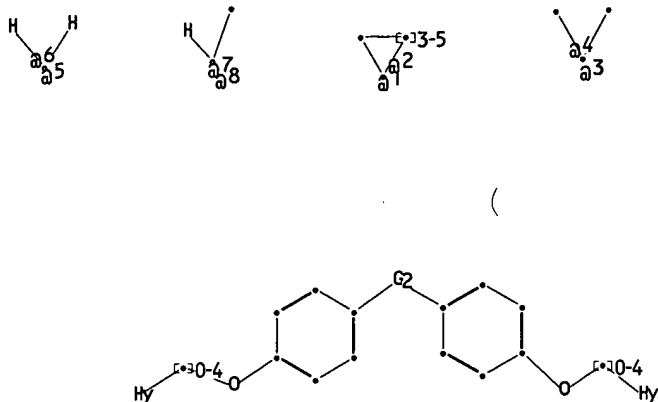

L54 SCREEN 1841
 L55 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L56 STRUCTURE UPLOADED
 L57 QUE L56 AND L54 NOT L55
 L58 3 S L57 SSS SAM
 L59 SCREEN 1841
 L60 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L61 STRUCTURE UPLOADED
 L62 QUE L61 AND L59 NOT L60
 L63 3 S L62 SSS SAM
 L64 SCREEN 1841
 L65 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L66 STRUCTURE UPLOADED
 L67 QUE L66 AND L64 NOT L65
 L68 0 S L67 SSS SAM
 L69 SCREEN 1841
 L70 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L71 STRUCTURE UPLOADED
 L72 QUE L71 AND L69 NOT L70
 L73 0 S L72 SSS SAM
 L74 SCREEN 1841
 L75 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L76 STRUCTURE UPLOADED
 L77 QUE L76 AND L74 NOT L75
 L78 0 S L77 SSS SAM
 L79 SCREEN 1841
 L80 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L81 STRUCTURE UPLOADED
 L82 QUE L81 AND L79 NOT L80
 L83 0 S L82 SSS SAM
 L84 SCREEN 1841
 L85 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L86 STRUCTURE UPLOADED
 L87 QUE L86 AND L84 NOT L85
 L88 0 S L87 SSS SAM
 L89 SCREEN 1841
 L90 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047
 L91 STRUCTURE UPLOADED
 L92 QUE L91 AND L89 NOT L90
 L93 0 S L92 SSS SAM
 L94 48 S L92 SSS FUL

FILE 'CAPLUS' ENTERED AT 14:57:06 ON 14 MAY 2003
 L95 17 S L94

FILE 'CAOLD' ENTERED AT 14:57:43 ON 14 MAY 2003

=> s 194
 L96 0 L94

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	255.89
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-11.07



chain nodes :

13 14 15 16 17 19 20 35 40 41 42 46 47 48

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 28 29 30

ring/chain nodes :

36 37

chain bonds :

2-14 5-13 9-13 12-15 14-16 15-17 16-19 17-20 35-36 35-37 40-41 40-42 46-47
46-48

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 28-29 28-30 29-30

exact/norm bonds :

2-14 5-13 9-13 12-15 14-16 15-17 16-19 17-20

exact bonds :

28-29 28-30 29-30 35-36 35-37 40-41 40-42 46-47 46-48

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 1 : 7 : 28 :

G2: [*1-*2], [*3-*4], [*5-*6], [*7-*8]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 28:Atom
29:Atom 30:Atom 35:CLASS 36:CLASS 37:CLASS 40:CLASS 41:CLASS 42:CLASS 46:CLASS
47:CLASS 48:CLASS

Generic attributes :

19:
Saturation : Saturated
Number of Hetero Atoms : less than 2

Type of Ring System : Monocyclic
20:
Saturation : Saturated
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

Element Count :

Node 19: Limited

N,N1

C,C3

O,O0

S,S0

Node 20: Limited

N,N1

C,C3

O,O0

S,S0

=>

Uploading 09943420 (amended).str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 19:10:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 14319 TO ITERATE

7.0% PROCESSED 1000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 279218 TO 293542

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss ful

FULL SEARCH INITIATED 19:11:07 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 286903 TO ITERATE

100.0% PROCESSED 286903 ITERATIONS

92 ANSWERS

SEARCH TIME: 00.00.08

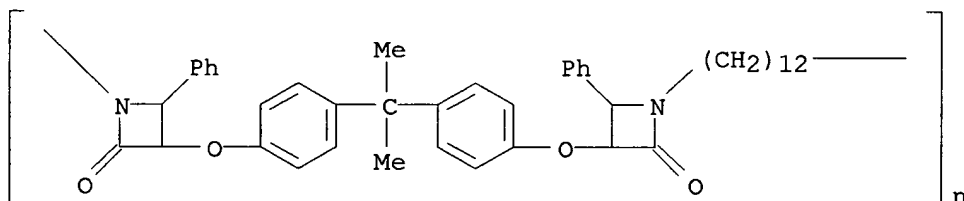
L3 92 SEA SSS FUL L1

=> s l3

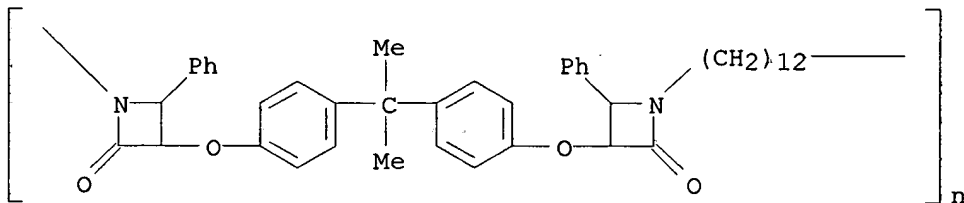
L4 17 L3

=> d l4 1-17 bib,ab,hitstr

L4 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:386414 CAPLUS
 DN 137:125499
 TI Selective reduction of main-chain 2-azetidinone moieties into azetidines for polymer modification
 AU Sudo, Atsushi; Iitaka, Yoshiro; Endo, Takeshi
 CS Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan
 SO Journal of Polymer Science, Part A: Polymer Chemistry (2002), 40(11), 1912-1917
 CODEN: JPACEC; ISSN: 0887-624X
 PB John Wiley & Sons, Inc.
 DT Journal
 LA English
 AB Azetidinone-contg. polymer prepd. by bisphenol A bis(carboxymethyl ether) polycondensation with 1,12-dodecanediamine bis(phenylmethylethylidene) was reduced with diisobutylaluminum hydride and alkylated with Me triflate. Model compd. reactions show that Me-alkylated salt undergoes ring-opening with polyamine-polyether formation.
 IT 302917-57-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (selective redn. of main-chain 2-azetidinone moieties into azetidines for polymer modification)
 RN 302917-57-3 CAPLUS
 CN Poly[(2-oxo-4-phenyl-1,3-azetidinediyl)oxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy(2-oxo-4-phenyl-3,1-azetidinediyl)-1,12-dodecanediyl] (9CI) (CA INDEX NAME)



IT 302917-57-3DP, reduced, Me triflate alkylation product, ring-opened
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (selective redn. of main-chain 2-azetidinone moieties into azetidines for polymer modification)
 RN 302917-57-3 CAPLUS
 CN Poly[(2-oxo-4-phenyl-1,3-azetidinediyl)oxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy(2-oxo-4-phenyl-3,1-azetidinediyl)-1,12-dodecanediyl] (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:171852 CAPLUS
 DN 136:216528
 TI Preparation of linked benzene derivatives as sodium channel modulators
 IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel;
 Turner, S. Derek
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

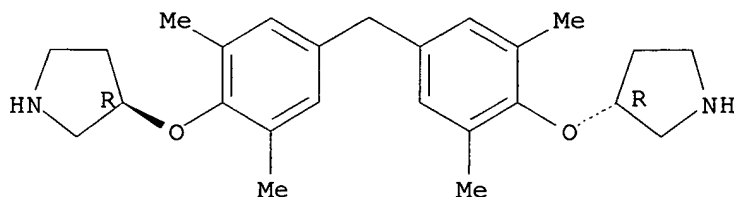
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001086965	A5	20020313	AU 2001-86965	20010830
	US 2003027822	A1	20030206	US 2001-943420	20010830 ← Appl.
PRAI	US 2000-229572P	P	20000831		
	WO 2001-US27128	W	20010830		
OS	MARPAT 136:216528				
AB	<p> Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NRm wherein Rm = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)m, (CR5R6)w, O(CR5R6)rO, N(Rk) where m = 0-2, w = 1-3, r = 2-3; Rk = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC50 value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human). </p>				
IT	<p> 402759-50-6P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP </p>				

(Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of linked benzene derivs. via Mitsunobu reaction of linked
 phenols with the requisite alc.)

RN 402759-50-6 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-,
 (3R,3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 402759-46-0P 402759-47-1P 402759-48-2P
 402759-49-3P 402759-51-7P 402759-52-8P
 402759-53-9P 402759-54-0P 402759-55-1P
 402759-57-3P 402759-59-5P 402759-60-8P
 402759-61-9P 402759-63-1P 402759-64-2P
 402759-65-3P 402759-67-5P 402759-68-6P
 402759-77-7P 402759-78-8P 402759-79-9P
 402759-80-2P 402759-84-6P 402759-85-7P
 402759-86-8P 402759-87-9P 402759-88-0P
 402759-89-1P 402759-90-4P 402759-91-5P
 402759-92-6P 402759-93-7P 402759-94-8P
 402759-95-9P 402760-00-3P 402760-01-4P
 402760-03-6P 402760-04-7P 402760-05-8P
 402760-64-9P 402760-66-1P 402760-67-2P
 402760-68-3P 402760-69-4P 402760-70-7P
 402760-71-8P 402760-72-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked
 phenols with the requisite alc.)

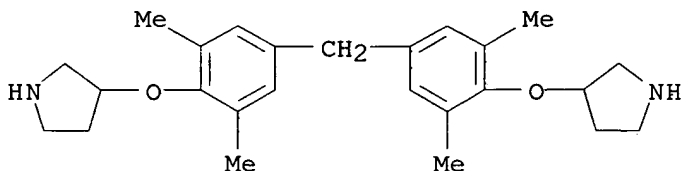
RN 402759-46-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-,
 trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 402759-45-9

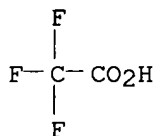
CMF C25 H34 N2 O2



CM 2

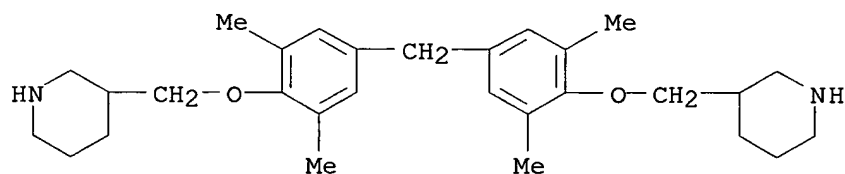
CRN 76-05-1

CMF C2 H F3 O2



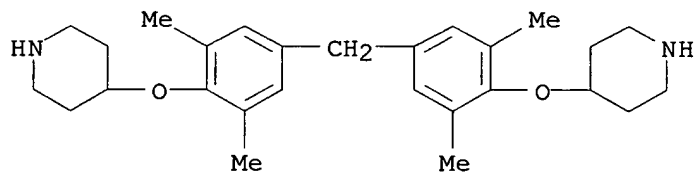
RN 402759-47-1 CAPLUS

CN Piperidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



RN 402759-48-2 CAPLUS

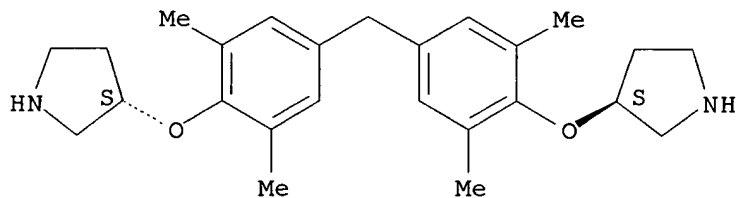
CN Piperidine, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



RN 402759-49-3 CAPLUS

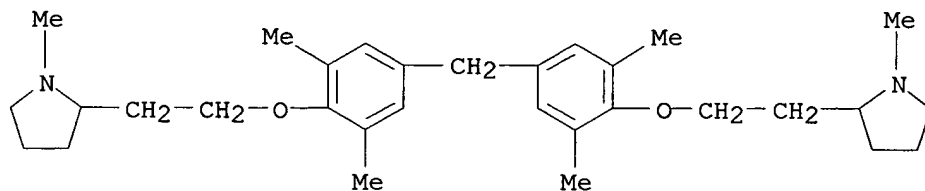
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (3S,3'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



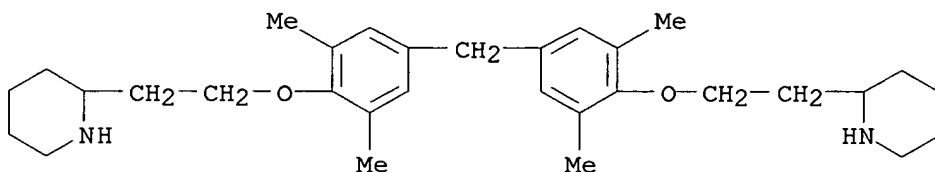
RN 402759-51-7 CAPLUS

CN Pyrrolidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-52-8 CAPLUS

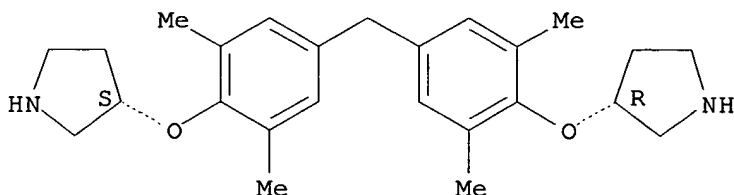
CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis- (9CI) (CA INDEX NAME)



RN 402759-53-9 CAPLUS

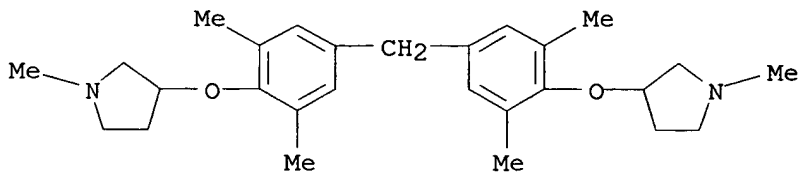
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (3R,3'S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



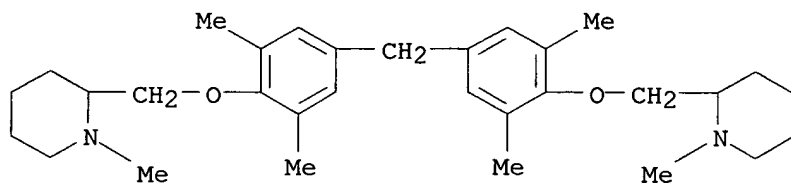
RN 402759-54-0 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



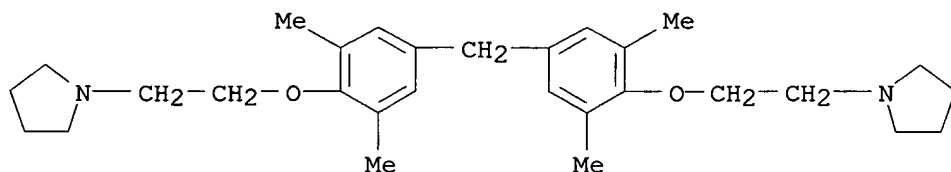
RN 402759-55-1 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



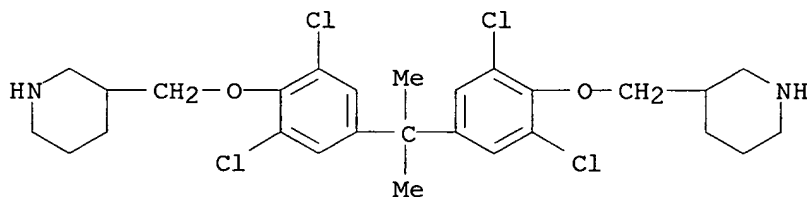
RN 402759-57-3 CAPLUS

CN Pyrrolidine, 1,1'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis- (9CI) (CA INDEX NAME)



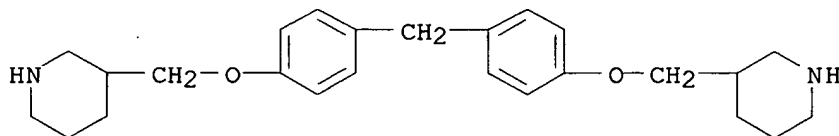
RN 402759-59-5 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2,6-dichloro-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



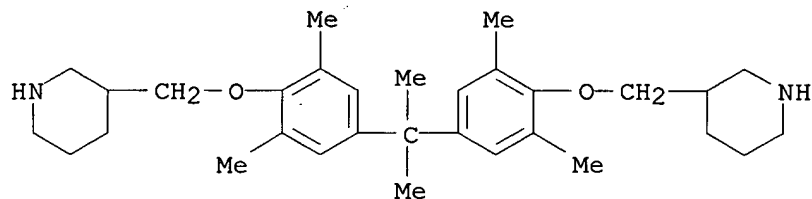
RN 402759-60-8 CAPLUS

CN Piperidine, 3,3'-[methylenebis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



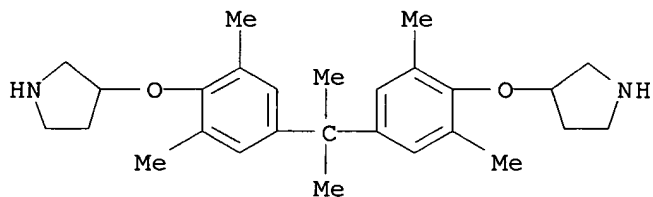
RN 402759-61-9 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis- (9CI) (CA INDEX NAME)



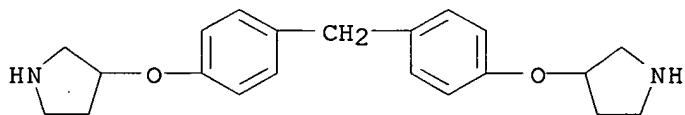
RN 402759-63-1 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



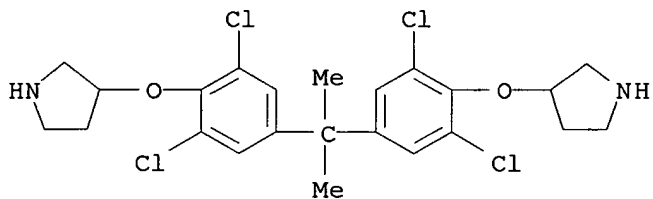
RN 402759-64-2 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



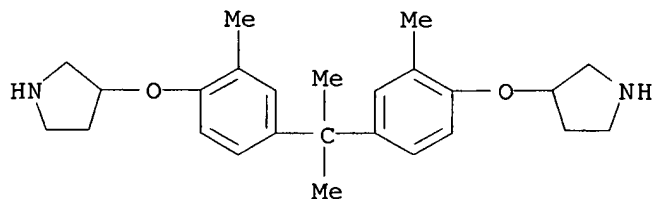
RN 402759-65-3 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dichloro-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



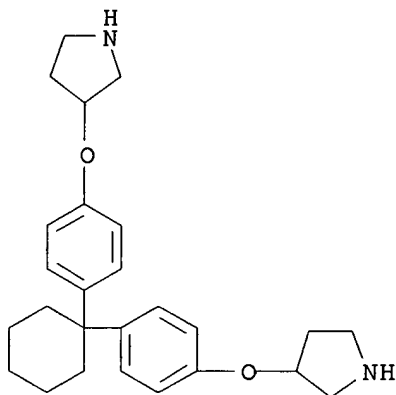
RN 402759-67-5 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



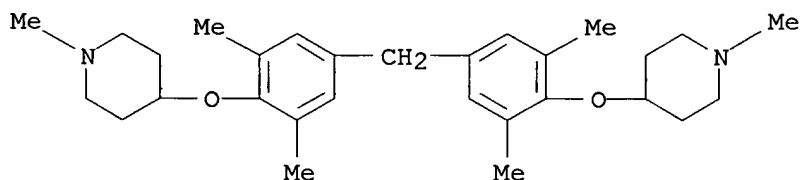
RN 402759-68-6 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



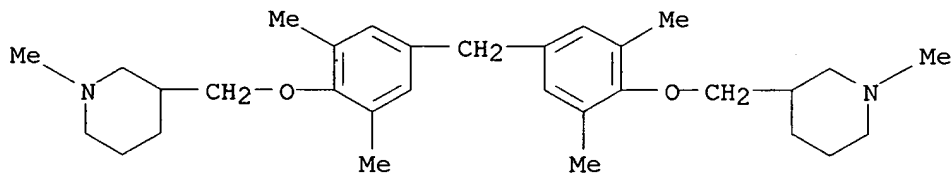
RN 402759-77-7 CAPLUS

CN Piperidine, 4,4'-[methylenabis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



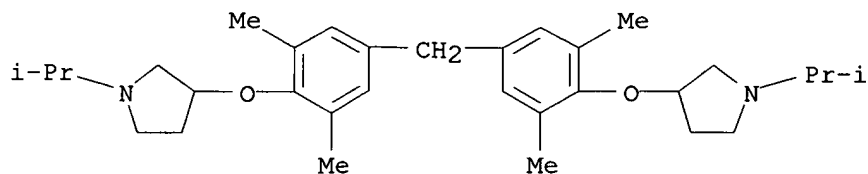
RN 402759-78-8 CAPLUS

CN Piperidine, 3,3'-[methylenabis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



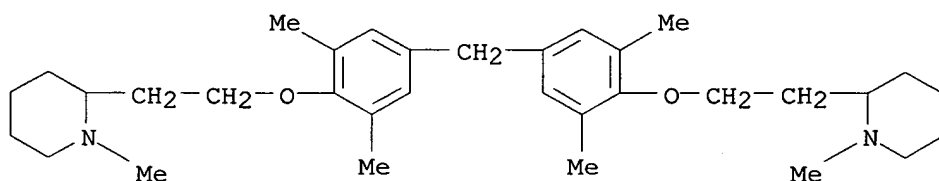
RN 402759-79-9 CAPLUS

RN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-80-2 CAPLUS

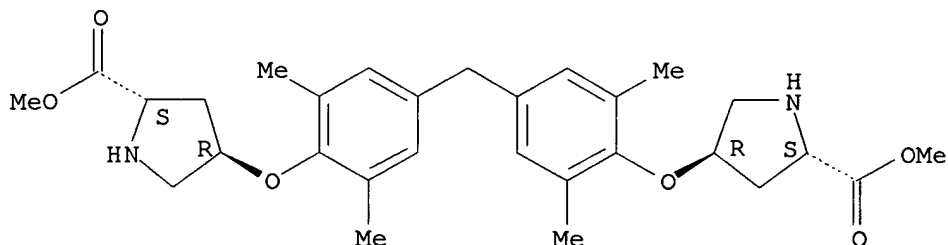
CN Piperidine, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402759-84-6 CAPLUS

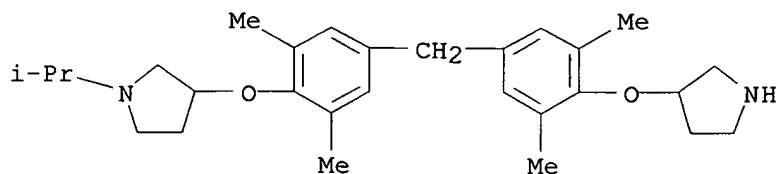
CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, dimethyl ester, (4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



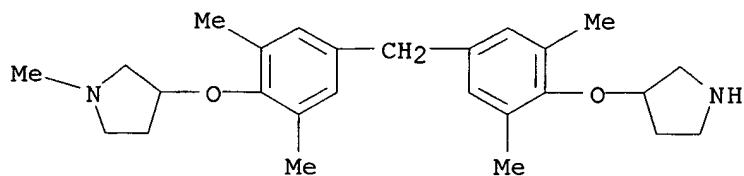
RN 402759-85-7 CAPLUS

CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 402759-86-8 CAPLUS

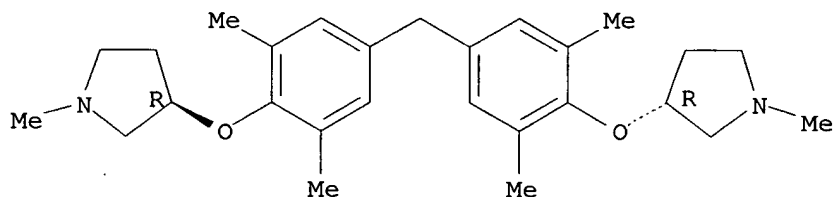
CN Pyrrolidine, 3-[4-[[3,5-dimethyl-4-(3-pyrrolidinyloxy)phenyl]methyl]-2,6-dimethylphenoxy]-1-methyl- (9CI) (CA INDEX NAME)



RN 402759-87-9 CAPLUS

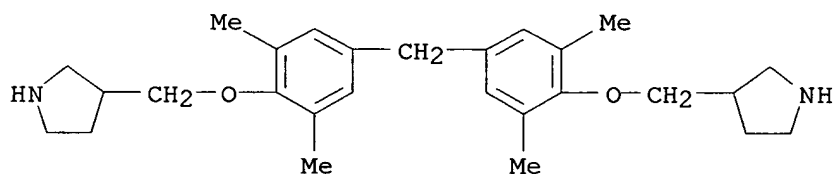
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl-, (3R,3'R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 402759-88-0 CAPLUS

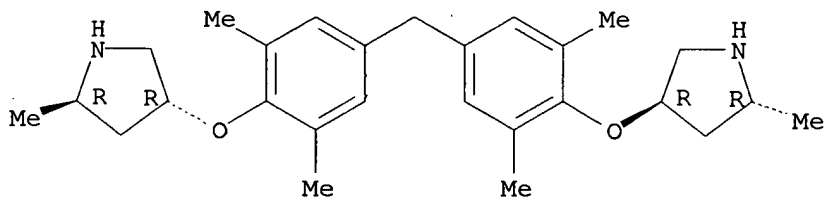
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis-, (9CI) (CA INDEX NAME)



RN 402759-89-1 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-methyl-, (3R,3'R,5R,5'R)-(9CI) (CA INDEX NAME)

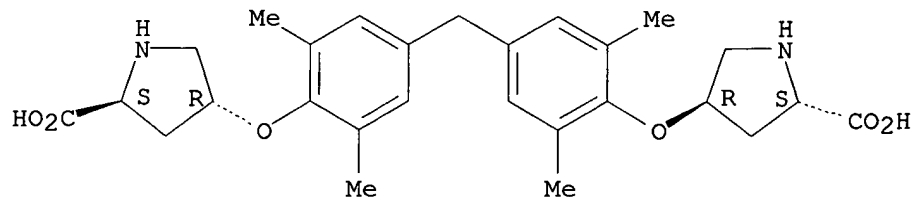
Absolute stereochemistry.



RN 402759-90-4 CAPLUS

CN L-Proline, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (4R,4'R)-(9CI) (CA INDEX NAME)

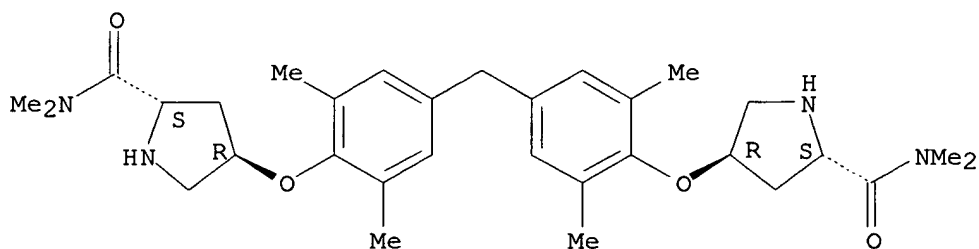
Absolute stereochemistry.



RN 402759-91-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[N,N-dimethyl-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

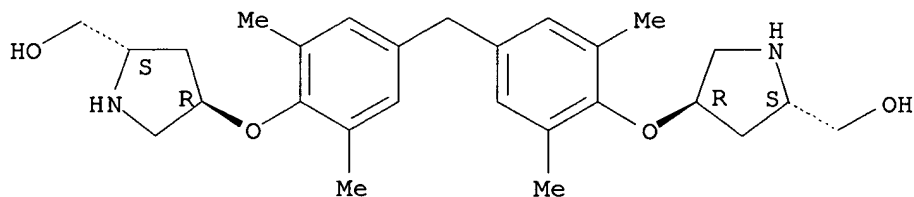
Absolute stereochemistry.



RN 402759-92-6 CAPLUS

CN 2-Pyrrolidinemethanol, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

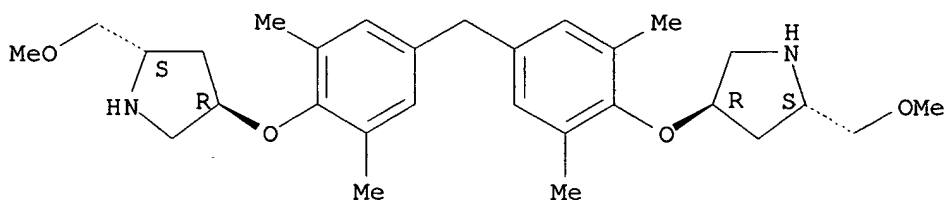
Absolute stereochemistry.



RN 402759-93-7 CAPLUS

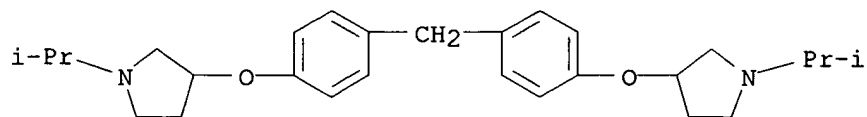
CN Pyrrolidine, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-(methoxymethyl)-, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



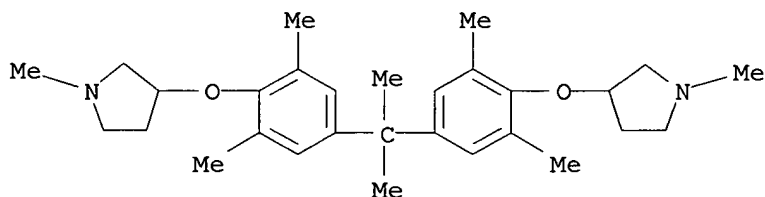
RN 402759-94-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis(4,1-phenyleneoxy)]bis[1-(1-methylethyl)-
(9CI) (CA INDEX NAME)



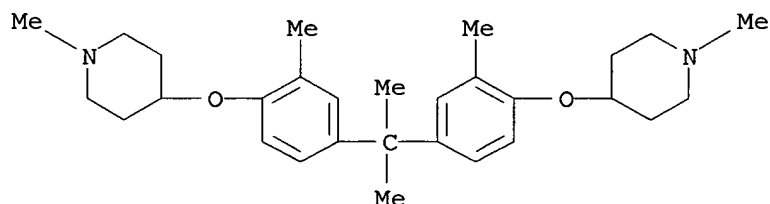
RN 402759-95-9 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



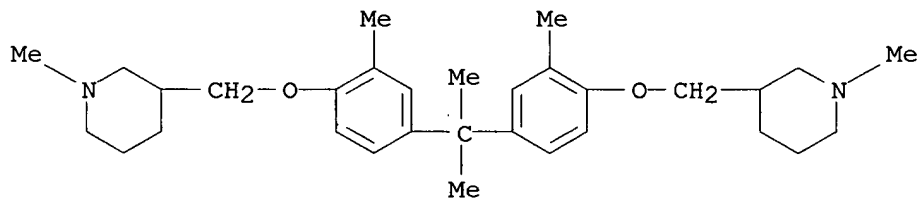
RN 402760-00-3 CAPLUS

CN Piperidine, 4,4'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



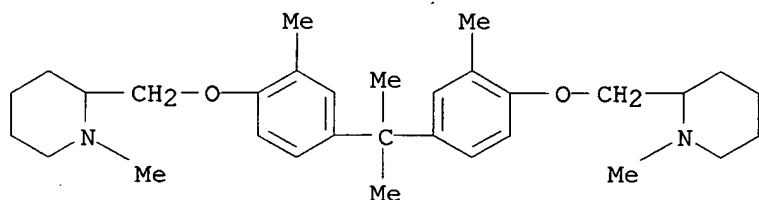
RN 402760-01-4 CAPLUS

CN Piperidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



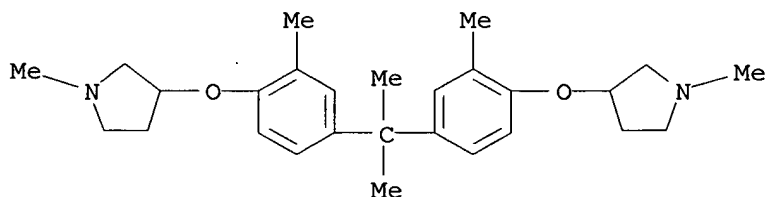
RN 402760-03-6 CAPLUS

CN Piperidine, 2,2'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



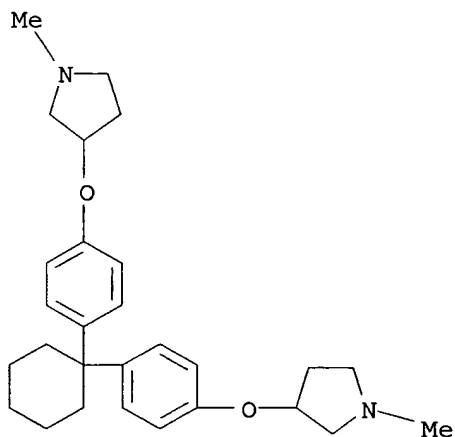
RN 402760-04-7 CAPLUS

CN Pyrrolidine, 3,3'-[(1-methylethylidene)bis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



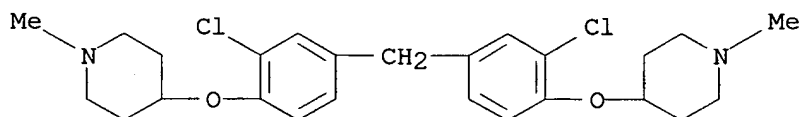
RN 402760-05-8 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



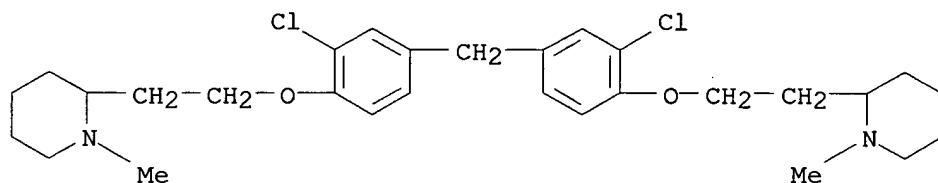
RN 402760-64-9 CAPLUS

CN Piperidine, 4,4'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



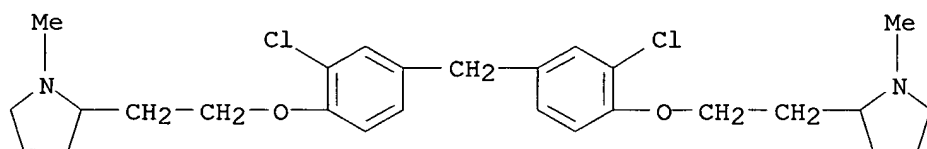
RN 402760-66-1 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



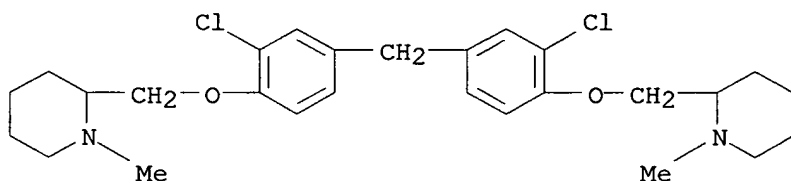
RN 402760-67-2 CAPLUS

CN Pyrrolidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxy-2,1-ethanediyl]]bis[1-methyl- (9CI) (CA INDEX NAME)



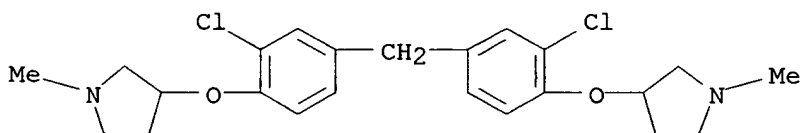
RN 402760-68-3 CAPLUS

CN Piperidine, 2,2'-[methylenebis[(2-chloro-4,1-phenylene)oxymethylene]]bis[1-methyl- (9CI) (CA INDEX NAME)



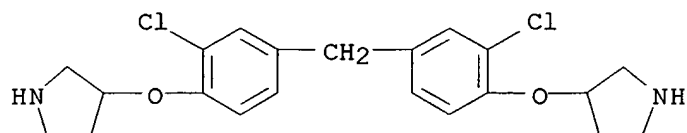
RN 402760-69-4 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



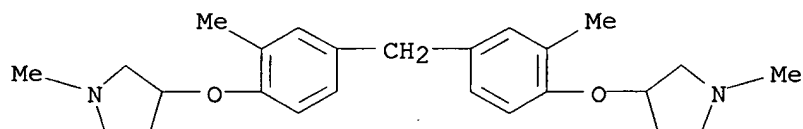
RN 402760-70-7 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-chloro-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)



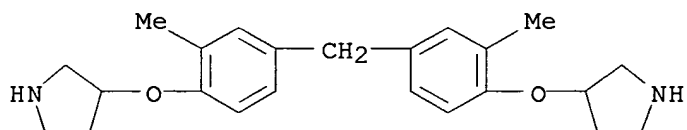
RN 402760-71-8 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis[1-methyl- (9CI) (CA INDEX NAME)



RN 402760-72-9 CAPLUS

CN Pyrrolidine, 3,3'-[methylenebis[(2-methyl-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)

IT 402761-15-3P 402761-16-4P 402761-17-5P
402761-18-6P

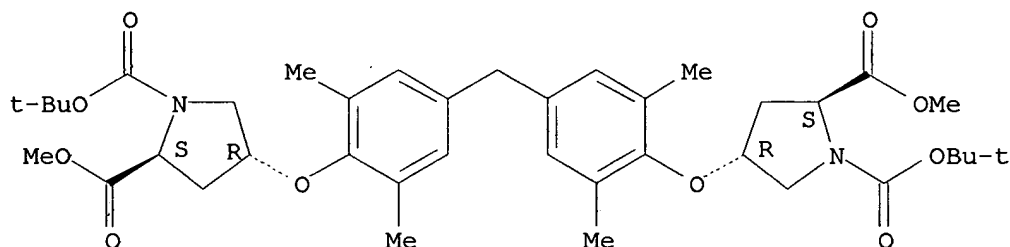
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

RN 402761-15-3 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) 2,2'-dimethyl ester, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

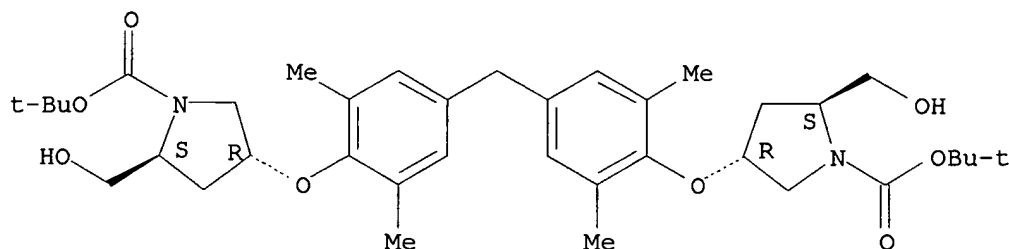


RN 402761-16-4 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-

phenylene)oxy]]bis[5-(hydroxymethyl)-, bis(1,1-dimethylethyl) ester,
(3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

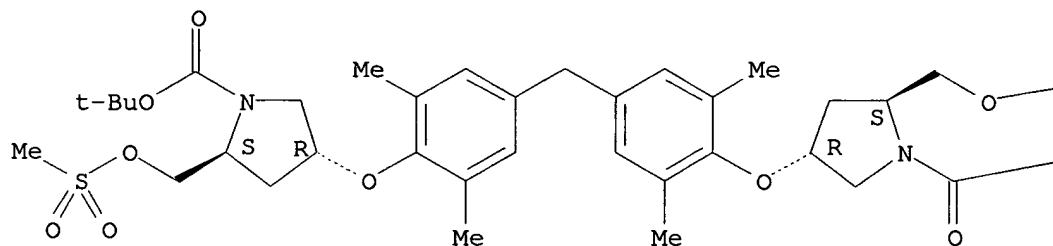


RN 402761-17-5 CAPLUS

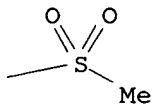
CN 1-Pyrrolidinecarboxylic acid, 3,3'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis[5-[(methanesulfonyl)oxy]methyl]-, bis(1,1-dimethylethyl) ester, (3R,3'R,5S,5'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

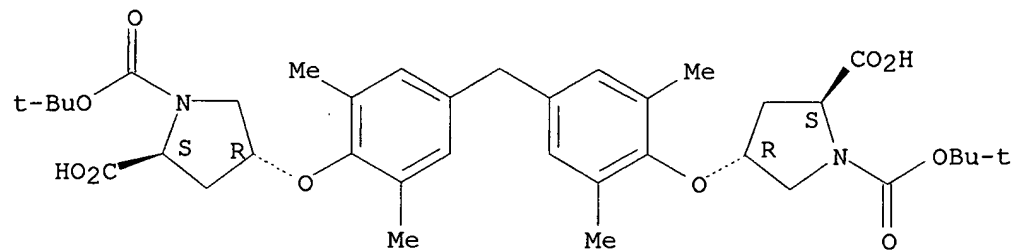


-OBu-t

RN 402761-18-6 CAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 4,4'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxy]]bis-, 1,1'-bis(1,1-dimethylethyl) ester, (2S,2'S,4R,4'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:816642 CAPLUS

DN 135:344384

TI Process for the preparation of sterically hindered aryloxyamines and use as stabilization agents for organic substrates

IN Pastor, Stephen Daniel; Shum, Sai Ping

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 72 pp.

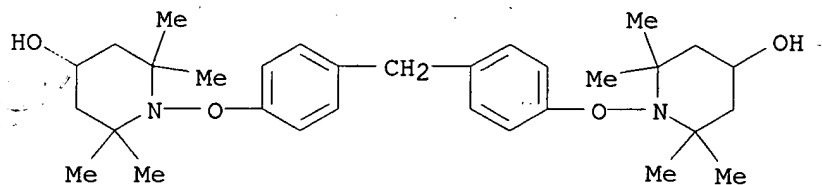
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001083455	A1	20011108	WO 2001-EP4620	20010424
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002007585	A1	20020124	US 2001-824149	20010402
	US 6579328	B2	20030617		
	EP 1278733	A1	20030129	EP 2001-936272	20010424
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-200988P	P	20000501		
	WO 2001-EP4620	W	20010424		
OS	CASREACT 135:344384; MARPAT 135:344384				
AB	A process is disclosed for the prepn. of sterically hindered N-substituted aryloxyamines I by the transition-metal-catalyzed decompn. of diazonium salts in the presence of a sterically hindered nitroxyl radical [n = 0 - 1; X = CH ₂ , O, S, N(H or alkyl); R ₆₋₇ = alkyl or together are tetra-/pentamethylene; E = (un)substituted Ph, pyridyl; R = H, alkyl, aryl, OH, carboxy, amino, alkylamino, etc.]. Included are over 20 synthetic examples, evaluation of reaction stoichiometry/catalyst and ability of I to stabilize colored/scented candle wax during fluorescent light exposure. For instance, a suspension of the nitroxyl radical of 4-benzyloxy-2,2,6,6-tetramethylpiperidine (5.79 g, 22.1 mmol), tert-Bu nitrite (2.2 mol equiv.), CuF ₂ (0.01 mol equiv.) in pyridine (120 mL) was heated to 70.degree.C under N ₂ while aniline (1.9 mol equiv.) was charged over 30 min. II was obtained in 55% yield after chromatog. purifn. The disclosed method provides improved yields compared to prior art. The compds. are useful for stabilizing an org. material against damage by light, oxygen and/or heat.				
IT	371756-19-3P				
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)				
	(process for prepn. of sterically hindered aryloxyamines and use as stabilization agents for org. substrates)				
RN	371756-19-3 CAPLUS				
CN	4-Piperidinol, 1,1'-[methylenebis(4,1-phenyleneoxy)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)				



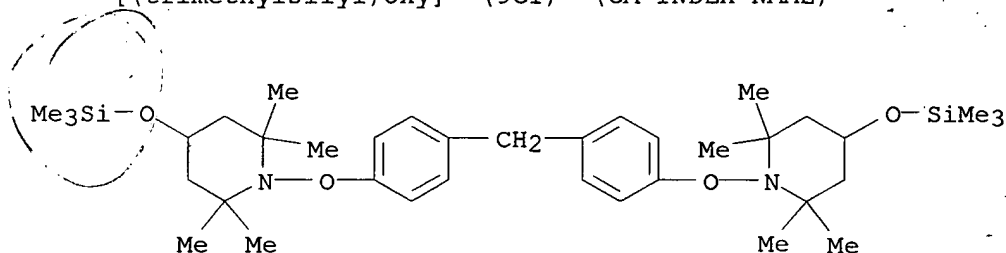
IT 371756-23-9P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(process for prepn. of sterically hindered aryloxyamines and use as stabilization agents for org. substrates)

RN 371756-23-9 CAPLUS

CN Piperidine, 1,1'-[methylenebis(4,1-phenyleneoxy)]bis[2,2,6,6-tetramethyl-4-[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



RE.CNT 6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:781696 CAPLUS

DN 136:86192

TI Reduction of the 2-azetidinone moiety in the polymer main chain: a novel synthetic route to polyamine with hydroxymethyl pendant

AU Sudo, Atsushi; Sato, Masato; Endo, Takeshi

CS Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan

SO Journal of Polymer Science, Part A: Polymer Chemistry (2001), 39(21), 3789-3796

CODEN: JPACEC; ISSN: 0887-624X

PB John Wiley & Sons, Inc.

DT Journal

LA English

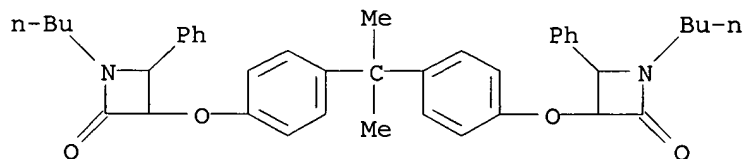
AB A polymer with a 2-azetidinone moiety in its main chain was efficiently synthesized by [2 + 2] cycloaddn. of bisimine with bisketene. The bisketene was easily prepd. by dehydrochlorination of the corresponding dicarboxylic acid chloride and was used without purifn. The treatment of the obtained polymer with lithium aluminum hydride resulted in a reductive ring-opening reaction of the 2-azetidinone moiety in the main chain that gave the corresponding linear polyamine with hydroxymethyl side chains.

IT 386285-03-6

RL: SPN (Synthetic preparation); PREP (Preparation)
(model reaction product; redn. of the 2-azetidinone moiety in the polymer main chain as a synthetic route to polyamines with hydroxymethyl pendant)

RN 386285-03-6 CAPLUS

CN 2-Azetidinone, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-butyl-4-phenyl- (9CI) (CA INDEX NAME)



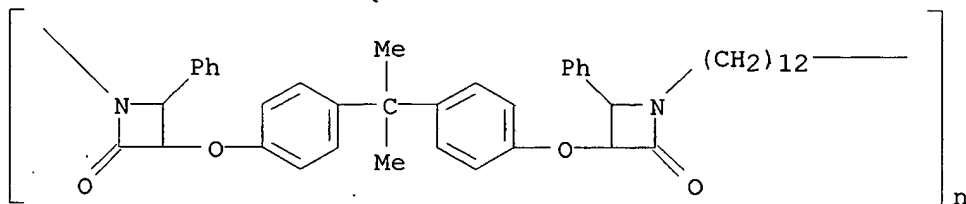
IT 302917-57-3

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

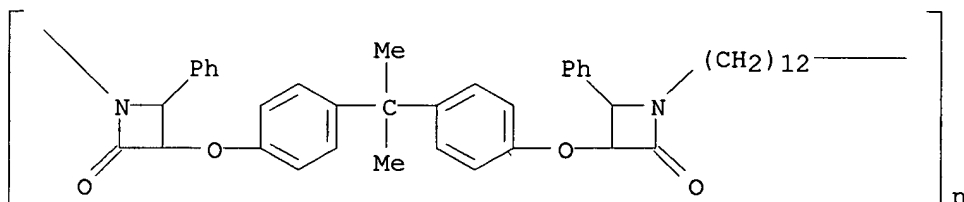
(redn. of the 2-azetidinone moiety in the polymer main chain as a synthetic route to polyamines with hydroxymethyl pendant)

RN 302917-57-3 CAPLUS

CN Poly[(2-oxo-4-phenyl-1,3-azetidinediyl)oxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy(2-oxo-4-phenyl-3,1-azetidinediyl)-1,12-dodecanediyl] (9CI) (CA INDEX NAME)

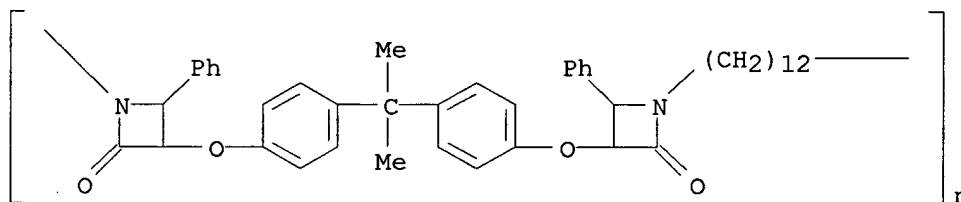


IT **302917-57-3D**, reduced, acetylated, partially hydrolyzed
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (redn. of the 2-azetidinone moiety in the polymer main chain as a
 synthetic route to polyamines with hydroxymethyl pendant)
 RN 302917-57-3 CAPLUS
 CN Poly[(2-oxo-4-phenyl-1,3-azetidinediyl)oxy-1,4-phenylene(1-
 methylethylidene)-1,4-phenyleneoxy(2-oxo-4-phenyl-3,1-azetidinediyl)-1,12-
 dodecanediyl] (9CI) (CA INDEX NAME)

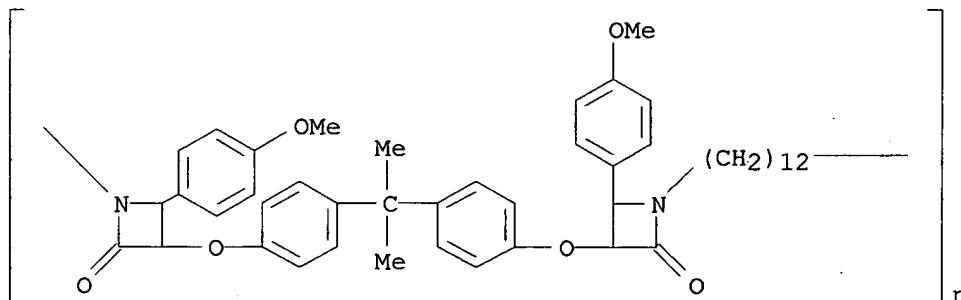


RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:385760 CAPLUS
 DN 133:322225
 TI Poly(2-azetidinone) reactive polymers based on [2+2] cycloaddition of
 bisketene with bisimines
 AU Sudo, Atsushi; Endo, Takeshi
 CS Research Laboratory of Resources Utilization, Tokyo Institute of
 Technology, Japan
 SO Koen Yoshishu - Nippon Setchaku Gakkai Nenji Taikai (1999), 37th, 1-4
 CODEN: KYNTFX
 PB Nippon Setchaku Gakkai
 DT Journal
 LA Japanese
 AB Polymers having 2-azetidinone skeleton on the main chain can be
 synthesized easily by the title cycloaddn. reaction, and polyamines having
 various functional pendent groups can be synthesized readily by the ring
 opening reaction of the 2-azetidinone part.
 IT **302917-57-3P 302917-58-4P 302917-59-5P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (poly(2-azetidinone) reactive polymers based on [2+2] cycloaddn. of
 bisketene with bisimines)
 RN 302917-57-3 CAPLUS
 CN Poly[(2-oxo-4-phenyl-1,3-azetidinediyl)oxy-1,4-phenylene(1-
 methylethylidene)-1,4-phenyleneoxy(2-oxo-4-phenyl-3,1-azetidinediyl)-1,12-
 dodecanediyl] (9CI) (CA INDEX NAME)

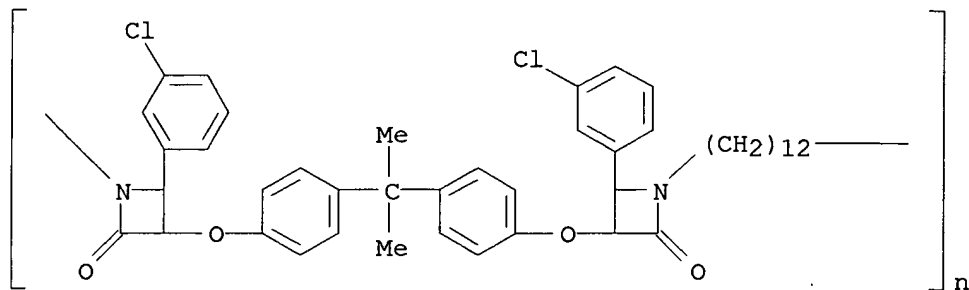


RN 302917-58-4 CAPLUS
 CN Poly[[2-(4-methoxyphenyl)-4-oxo-1,3-azetidinediyl]oxy-1,4-phenylene(1-
 methylethylidene)-1,4-phenyleneoxy[2-(4-methoxyphenyl)-4-oxo-3,1-
 azetidinediyl]-1,12-dodecanediyl] (9CI) (CA INDEX NAME)



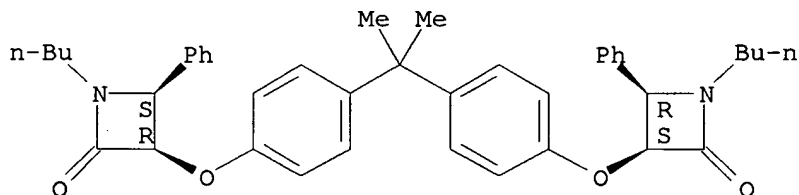
RN 302917-59-5 CAPLUS
 CN Poly[[2-(3-chlorophenyl)-4-oxo-1,3-azetidinediyl]oxy-1,4-phenylene(1-

methylethylidene)-1,4-phenyleneoxy[2-(3-chlorophenyl)-4-oxo-3,1-azetidinediyl]-1,12-dodecanediyl] (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:658915 CAPLUS
 DN 130:4152
 TI A Novel Reactive Polymer Having 2-Azetidinone-structure on the Main Chain:
 Development of Its Convenient Synthetic Method Based on [2 +
 2]Cycloaddition of Bisketene with Bisimine
 AU Sudo, Atsushi; Endo, Takeshi
 CS Research Laboratory of Resources Utilization, Tokyo Institute of
 Technology, Yokohama, 226-8503, Japan
 SO Macromolecules (1998), 31(22), 7996-7998
 CODEN: MAMOBX; ISSN: 0024-9297
 PB American Chemical Society
 DT Journal
 LA English
 AB A bisketene, which was generated directly from a bisphenol A derived
 carboxylic acid by treatment with 2-chloropyridinium iodide and
 triethylamine, reacted with a bisimide smoothly in a [2+2] cycloaddn. to
 give the corresponding poly(2-azetidinone) efficiently.
 IT **215817-00-8P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (model compd. for poly(azetidinone))
 RN 215817-00-8 CAPLUS
 CN 2-Azetidinone, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-butyl-
 4-phenyl-, (3R,3'S,4S,4'R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1984:211061 CAPLUS
 DN 100:211061
 TI Chemical bonding between a stabilizing compound and a polymer
 IN Karrer, Friedrich; Hofmann, Peter
 PA Ciba-Geigy A.-G. , Switz.
 SO Eur. Pat. Appl., 56 pp.
 CODEN: EPXXDW

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 101411	A2	19840222	EP 1983-810348	19830805
	EP 101411	A3	19851127		
	EP 101411	B1	19890125		
	R: BE, DE, FR, GB, IT, NL, SE				
	CA 1253143	A1	19890425	CA 1983-434173	19830809
	JP 59049214	A2	19840321	JP 1983-147284	19830811
	JP 06010229	B4	19940209		
	US 4731393	A	19880315	US 1986-873853	19860611
	JP 06240048	A2	19940830	JP 1993-204796	19930727
	JP 07122003	B4	19951225		
PRAI	CH 1982-4810		19820811		
	US 1983-520379		19830804		
	US 1985-757916		19850722		

AB Triazine derivs. (35) contg. .gtoreq.1 ethylenically unsatd. group and .gtoreq.1 2,2,6,6-tetramethylpiperidyl group/mol. are prepd. for use as reactive stabilizers for polymers, esp. polyolefins. The stabilizers form chem. bonds with the polymers. Thus, the reaction of N,N'-bis(2,2,6,6-tetramethyl-4-piperidyl)-1,6-hexanediamine [61260-55-7] with cyanuric chloride [108-77-0] and allylamine [107-11-9] gave compd. I [85438-51-3]. Polyethylene (II) [9002-88-4] was mixed with 0.4% I and 1.4% dicumyl peroxide and heated 15 min at 180.degree. to form chem. bonds between I and II and crosslink the II, giving modified II having breaking elongation 55%. During aging at 150.degree. in air, the breaking elongation decreased to 50% of the original value after 42 days, compared with <1 day for peroxide-crosslinked II contg. no I. When the crosslinked, I-contg. II was extd. with boiling CHCl3 for 5 days before the aging test, the breaking elongation decreased to 50.degree. of the original value after 14 days.

IT **90335-24-3P**

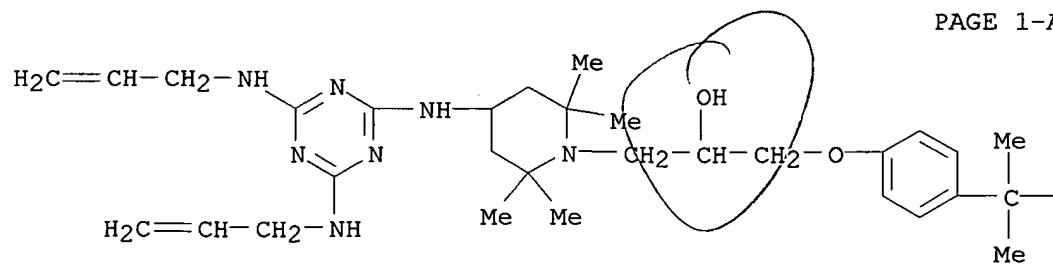
RL: PREP (Preparation)

(prepn. of, as reactive antioxidants for polymers)

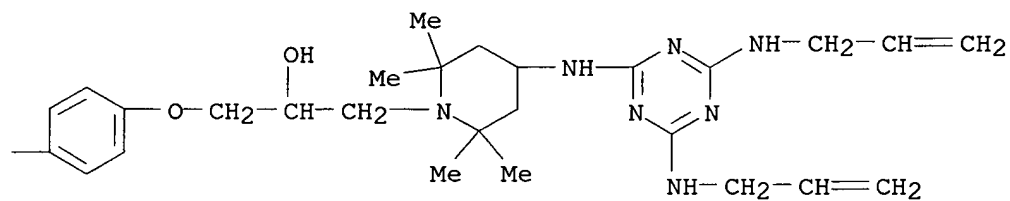
RN 90335-24-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-[[4,6-bis(2-propenylamino)-1,3,5-triazin-2-yl]amino]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

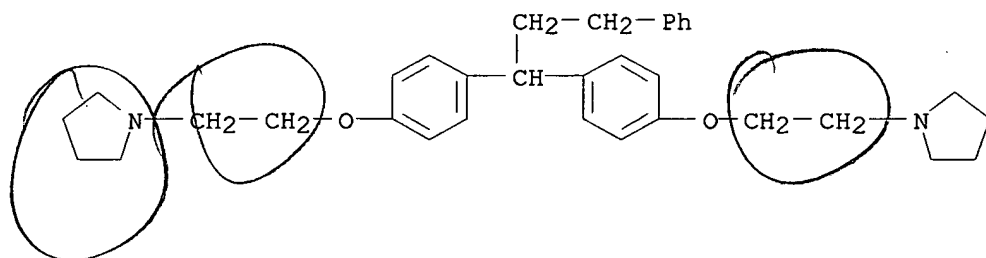
PAGE 1-A



PAGE 1-B



L4 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1983:522214 CAPLUS
 DN 99:122214
 TI Studies in antifertility agents. Part XXXVI. Synthesis of
 1-(p-methoxyphenyl)-1-[p-(.beta.-pyrrolidinoethoxy)phenyl]-3-
 phenylpropanes and 1-(p-methoxyphenyl)-1-[p-(.beta.-
 pyrrolidinoethoxy)phenyl]-2-benzylbutanes
 AU Malik, Mangel S.; Tewari, S. C.; Rastogi, Shri Nivas
 CS Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, 226 001, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including
 Medicinal Chemistry (1982), 21B(10), 919-22
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 99:122214
 AB Catalytic hydrogenation followed by NaBH₄ redn. of chalcones gives
 1-(p-methoxyphenyl)-3-phenylpropanol and 1-(p-methoxyphenyl)-2-
 benzylbutanols, which on treatment with PhOH-HCl or PhOH-AlCl₃, result in
 the corresponding 1-(p-hydroxyphenyl)propane and threo-/erythro-1-(p-
 hydroxyphenyl)butanes together with 1-(o-hydroxyphenyl)butane. The
 hydroxy derivs. were acetylated to give the corresponding acetoxy derivs.,
 one of which exhibits diuretic activity. Condensation of its hydroxy
 derivs. with 1-(.beta.-chloroethyl)pyrrolidine-HCl furnishes the title
 compds. I (R = H, Et, R₁ = Me, 2-pyrrolidinoethyl, R₂ = H, MeO) which do
 not inhibit pregnancy in rats at 10 mg/kg dose.
 IT **86355-57-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 86355-57-9 CAPLUS
 CN Pyrrolidine, 1,1'-[(3-phenylpropylidene)bis(4,1-phenyleneoxy-2,1-
 ethanediyl)]bis- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1982:163675 CAPLUS
 DN 96:163675
 TI Polyalkylpiperidine derivatives of s-triazine
 IN Rody, Jean
 PA Ciba-Geigy Corp. , USA
 SO U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 8,135, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4294963	A	19811013	US 1979-57673	19790716
PRAI	CH 1978-1402		19780208		
	US 1979-8135		19790131		

AB Reaction products of polyalkylpiperidine derivs. of 1,3,5-triazines with dihalides or polyepoxides are stabilizers, esp. light stabilizers, with low volatility and migration. Thus, stirring 28.5 g N,N',N''-tributyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidiny)melamine [71981-32-3], 4 g 1,4-butanediol diglycidyl ether [2425-79-8], and 100 mL C8H17OH 10 h at 160.degree. and stripping in vacuo gave a slightly yellow adduct [80459-61-6].

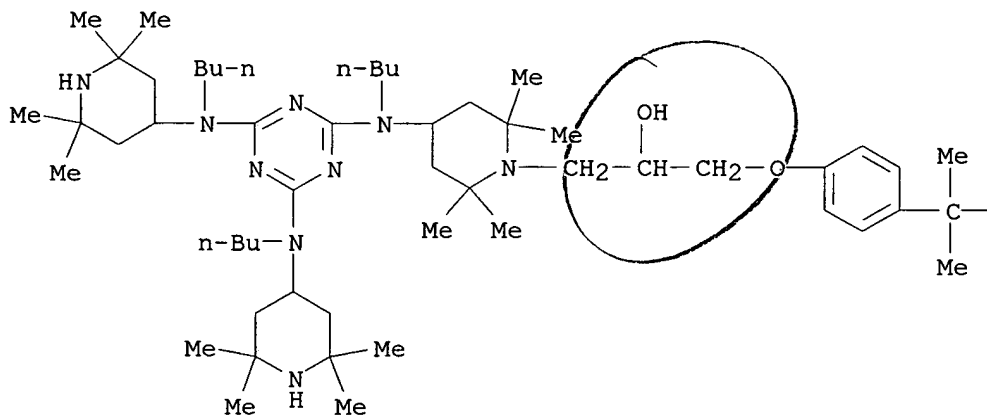
IT **80459-60-5**

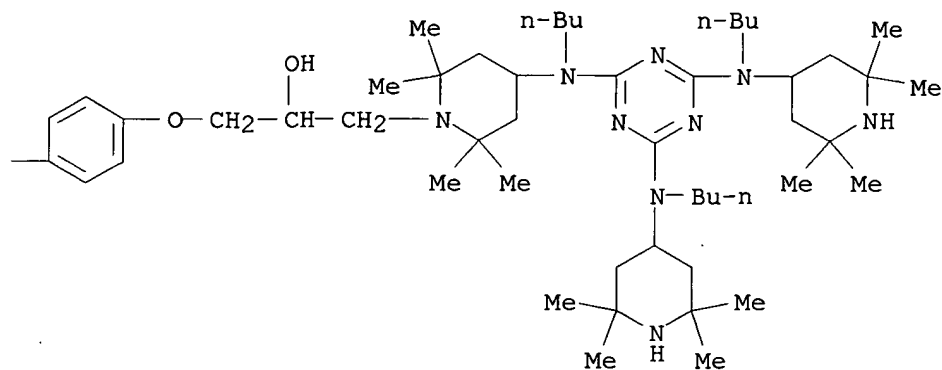
RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (light stabilizers, for polymers)

RN 80459-60-5 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-[[4,6-bis[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]butylamino]-2,2,6,6-tetramethyl-(9CI) (CA INDEX NAME)

PAGE 1-A





L4 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1979:6902 CAPLUS
 DN 90:6902
 TI Piperidine derivatives useful as polymer stabilizers
 PA Sankyo Co., Ltd., Japan
 SO Neth. Appl., 177 pp.
 CODEN: NAXXAN

DT Patent

LA Dutch

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7800505	A	19780718	NL 1978-505	19780116
	JP 53101380	A2	19780904	JP 1977-3285	19770114
	JP 62042898	B4	19870910		
	FR 2377381	A1	19780811	FR 1978-999	19780113
	FR 2377381	B1	19820108		
	BE 862958	A1	19780717	BE 1978-184368	19780116
	GB 1574999	A	19800917	GB 1978-1715	19780116
	US 4371644	A	19830201	US 1980-168271	19800710
PRAI	JP 1977-3285		19770114		
	US 1978-866957		19780105		

AB Compds. contg. 2 or 3 substituted or unsubstituted 2,2,6,6-tetramethylpiperidiny1 groups attached to a central radical by groups contg. ether moieties and preferably OH groups are useful as polymer stabilizers and have improved evapn., extn., and heat resistance. Thus, a mixt. of 5.1 g 4-(N-butylacetamido)-2,2,6,6-tetramethylpiperidine [67778-07-8] and 3.5 g 2,2-bis[4-(2,3-epoxypropoxy)cyclohexyl]propane [13410-58-7] was heated 5 h at 200-10.degree., giving 2,2-bis[4-[3-[4-(N-butylacetamido)-2,2,6,6-tetramethylpiperidino]-2-hydroxypropoxy]cyclohexyl]propane (I) [67812-46-8]. A mixt. of polypropylene [9003-07-0] 100, stearyl 2-(4-hydroxy-3,5-di-tert-butylphenyl)propionate 0.2, and I 0.25 part was processed into a 0.1 mm sheet by std. methods and exposed to light in an accelerated testing app. This compn. had time to 50% loss of elongation 6.6 times that of a control without I, compared to 2.0 times for a com. stabilizer, Tinuvin 327.

IT 67777-70-2 67777-71-3 67777-72-4
 67777-73-5 67777-74-6 67777-75-7
 67777-76-8 67777-89-3 67777-95-1
 67777-96-2 67778-13-6 67778-14-7
 67812-49-1 67913-12-6 68406-84-8

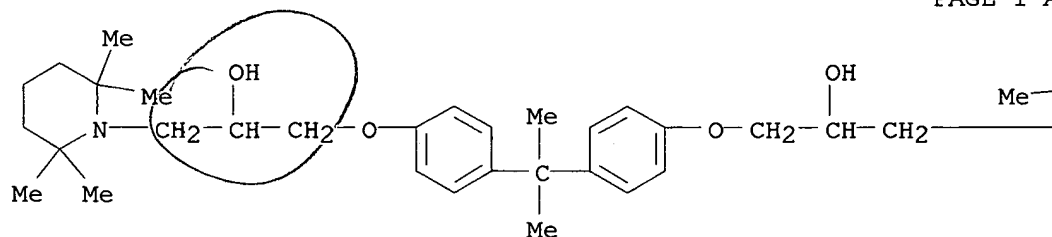
RL: USES (Uses)

(light stabilizers, for plastics)

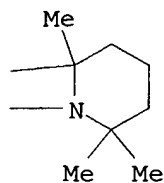
RN 67777-70-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



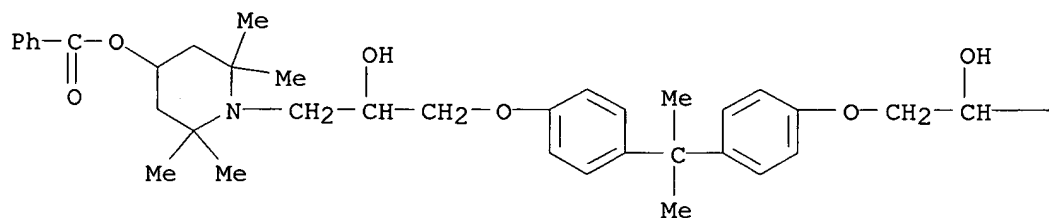
PAGE 1-B



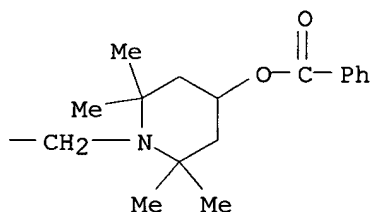
RN 67777-71-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)]

PAGE 1-A



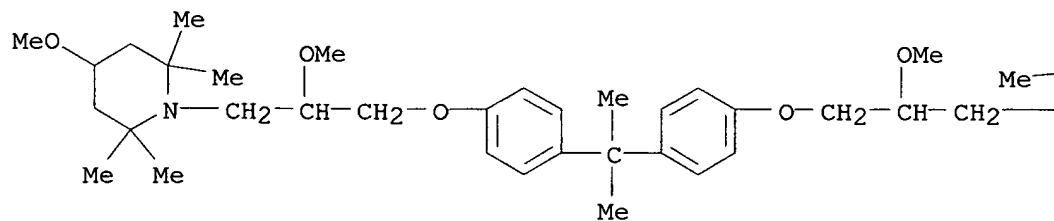
PAGE 1-B



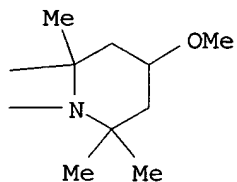
RN 67777-72-4 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-methoxy-3,1-propanediyl)]]bis[4-methoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)]

PAGE 1-A



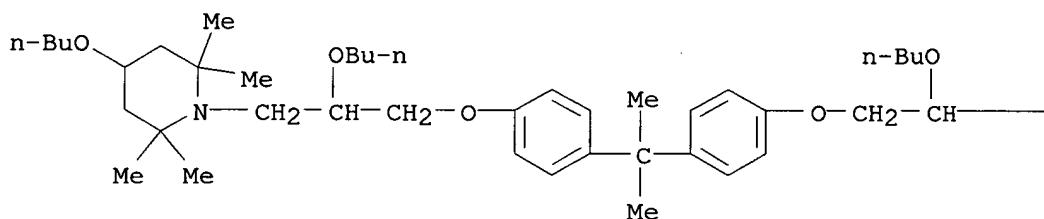
PAGE 1-B



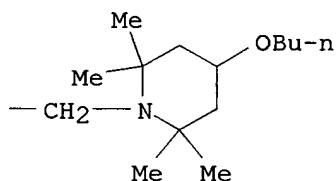
RN 67777-73-5 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-butoxy-3,1-propanediyl)]]bis[4-butoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



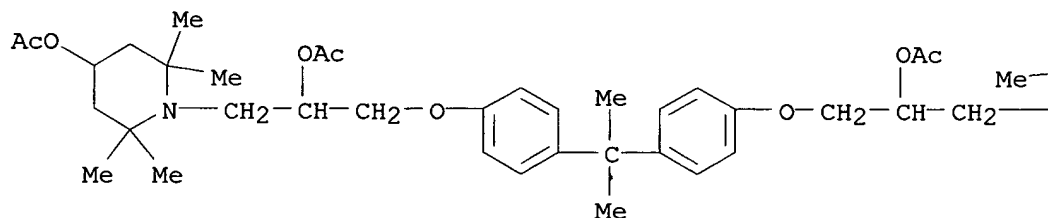
PAGE 1-B



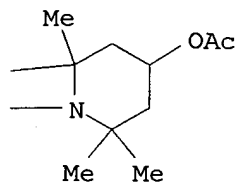
RN 67777-74-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(acetyloxy)-2,2,6,6-tetramethyl-, diacetate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



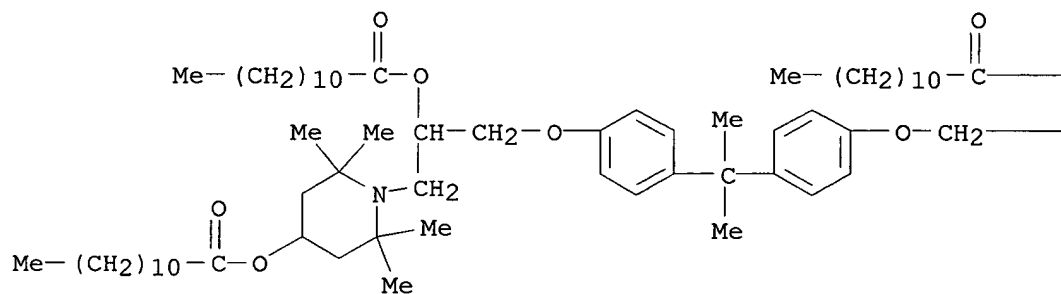
PAGE 1-B



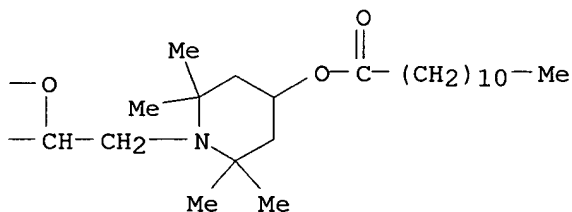
RN 67777-75-7 CAPLUS

CN Dodecanoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[2-[(1-oxododecyl)oxy]-3,1-propanediyl] (2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



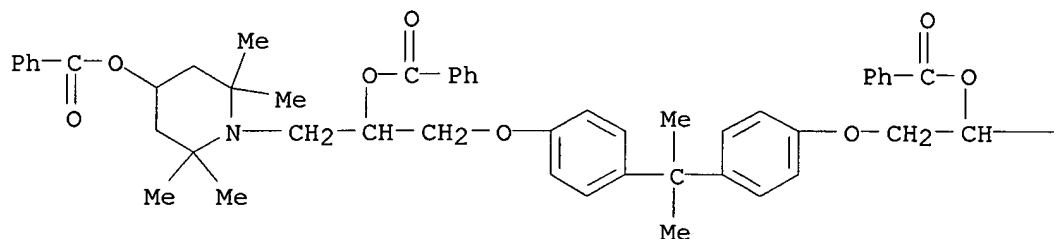
PAGE 1-B



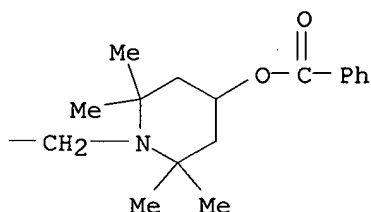
RN 67777-76-8 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl-, dibenzoate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



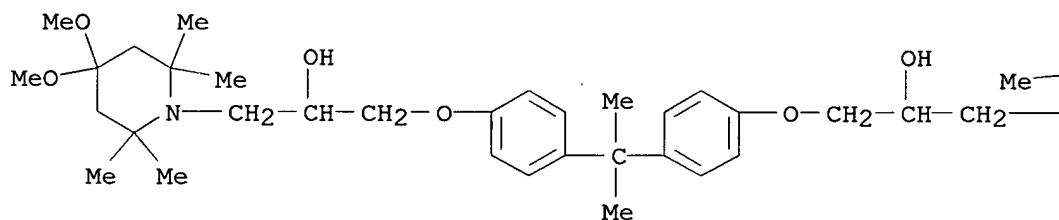
PAGE 1-B



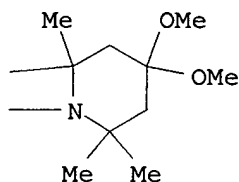
RN 67777-89-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4,4-dimethoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



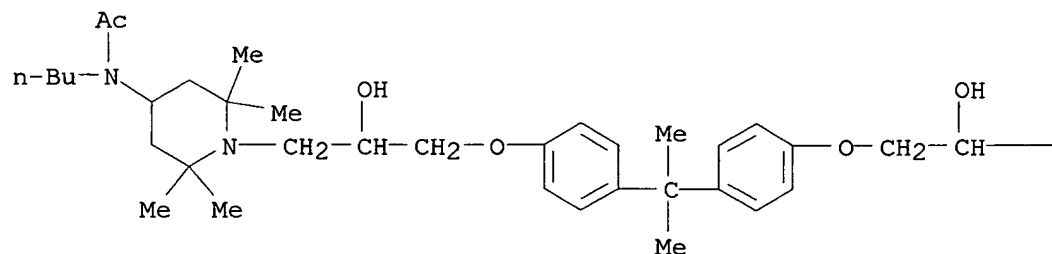
PAGE 1-B



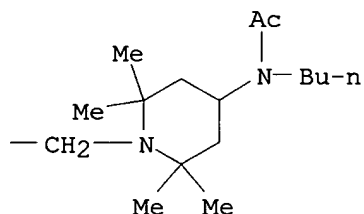
RN 67777-95-1 CAPLUS

CN Acetamide, N,N'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl) (2,2,6,6-tetramethyl-1,4-piperidinediyl)]]bis[N-butyl- (9CI) (CA INDEX NAME)

PAGE 1-A



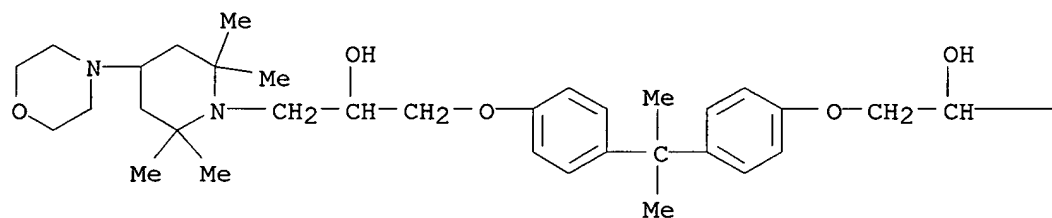
PAGE 1-B



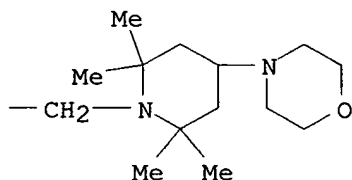
RN 67777-96-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-(4-morpholinyl)- (9CI)
(CA INDEX NAME)

PAGE 1-A



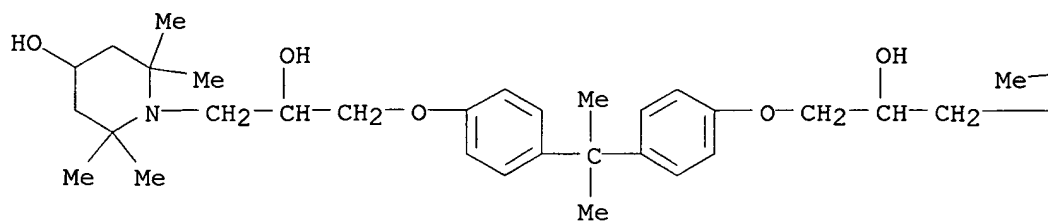
PAGE 1-B



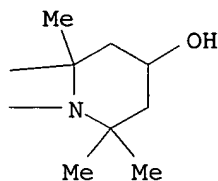
RN 67778-13-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-hydroxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



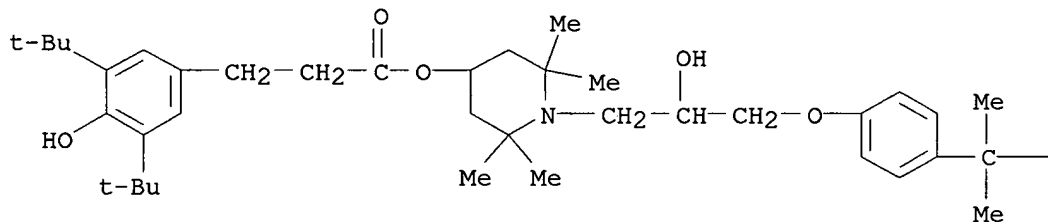
PAGE 1-B



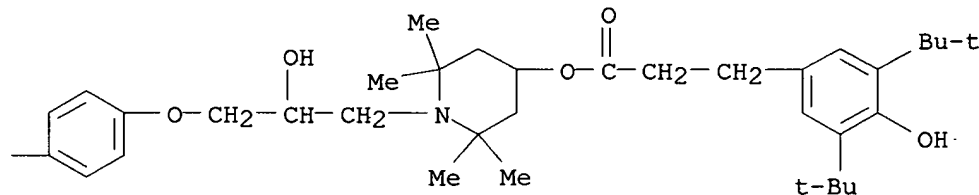
RN 67778-14-7 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-
propanediyl)] (2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA
INDEX NAME)

PAGE 1-A



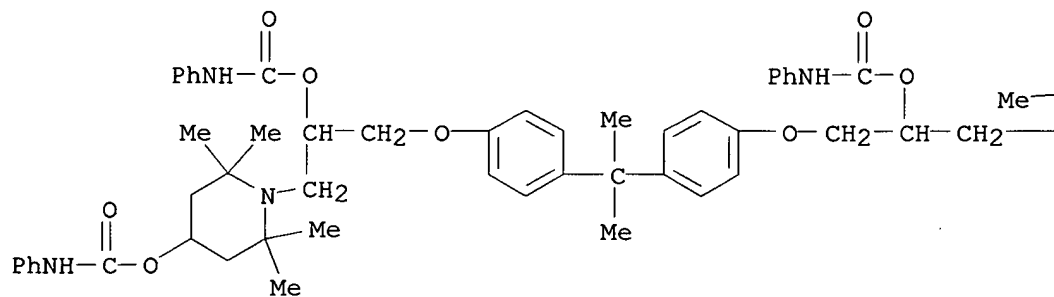
PAGE 1-B



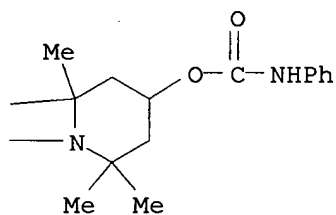
RN 67812-49-1 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-
phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-
[[(phenylamino)carbonyl]oxy]-, bis(phenylcarbamate) (ester) (9CI) (CA
INDEX NAME)

PAGE 1-A



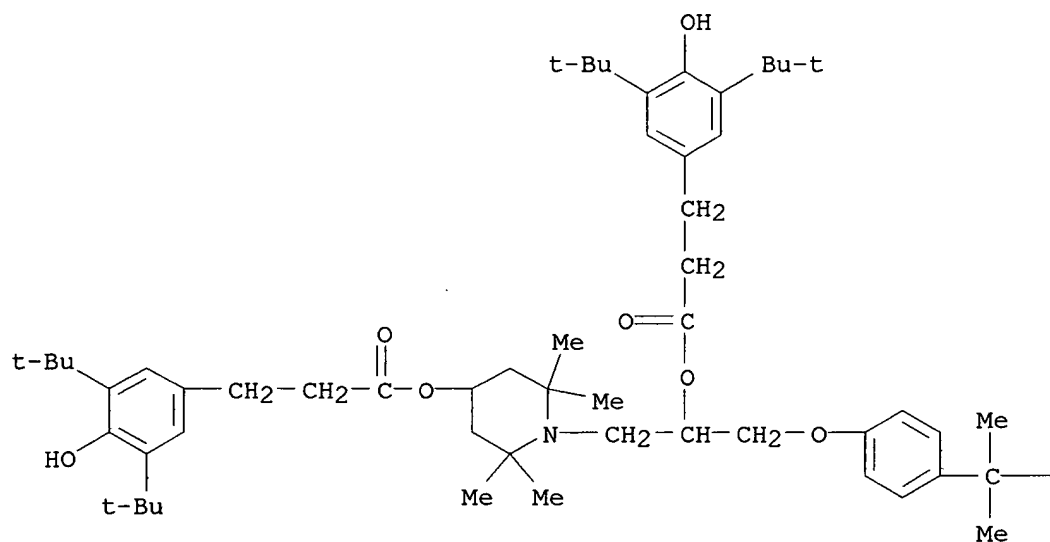
PAGE 1-B



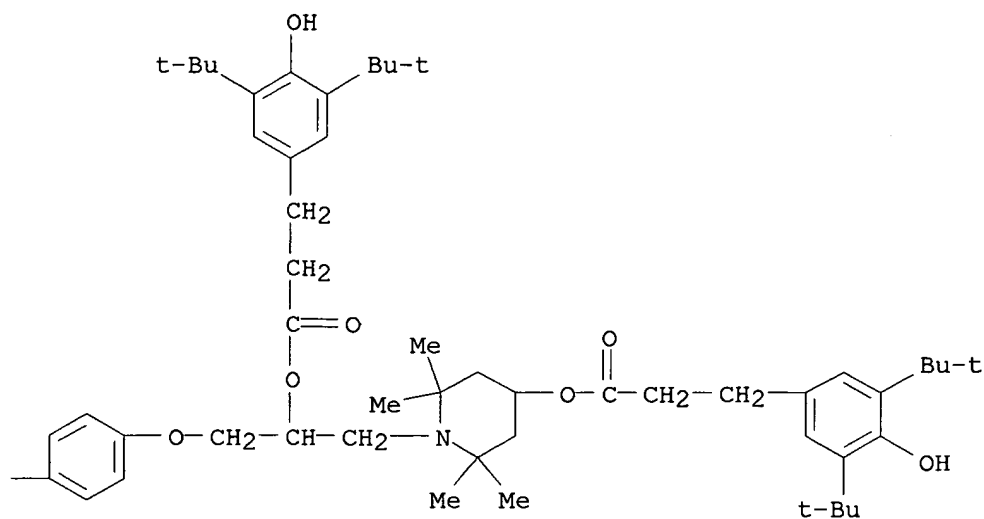
RN 67913-12-6 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 (1-methylethylidene)bis[4,1-phenyleneoxy[2-[3-[3,5-bis(1,1-dimethylethyl)-
 4-hydroxyphenyl]-1-oxopropoxy]-3,1-propanediyl] (2,2,6,6-tetramethyl-1,4-
 piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



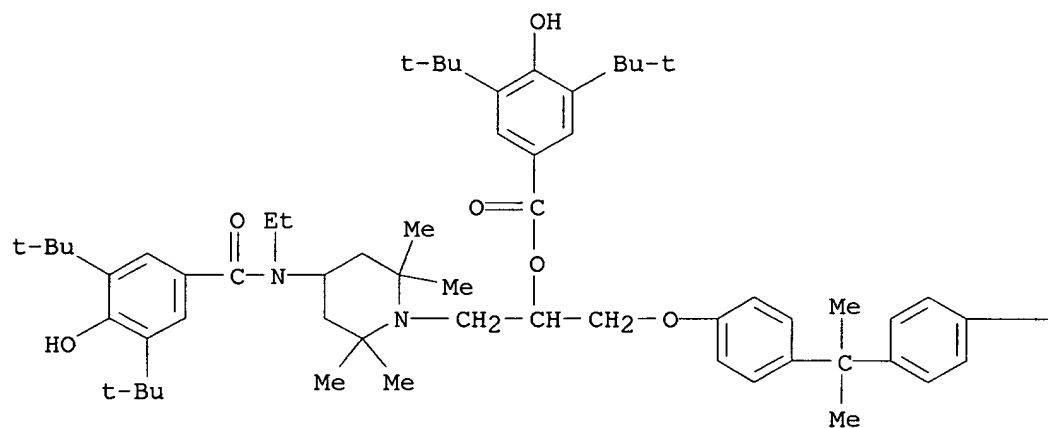
PAGE 1-B

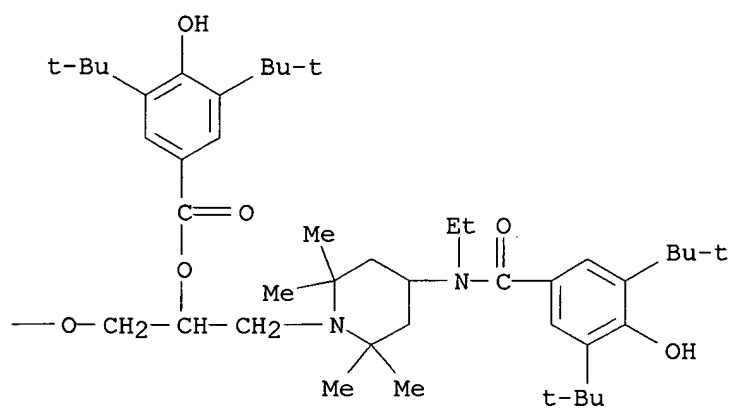


RN 68406-84-8 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, (1-methylethylidene)bis[4,1-phenyleneoxy[1-[[4-[[3,5-bis(1,1-dimethylethyl)-4-hydroxybenzoyl]ethylamino]-2,2,6,6-tetramethyl-1-piperidiny]methyl]-2,1-ethanediyl]] ester (9CI) (CA INDEX NAME)

PAGE 1-A





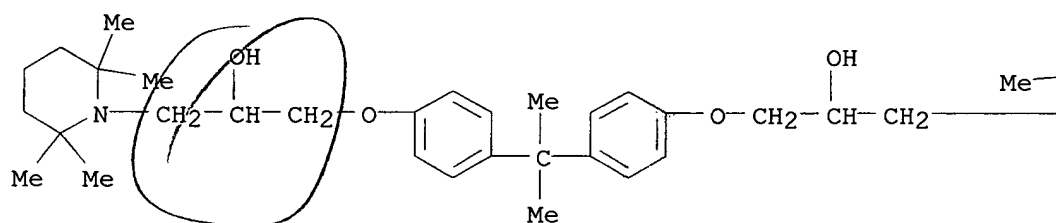
L4 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1978:580832 CAPLUS
 DN 89:180832
 TI Piperidine derivatives useful as stabilizers for polymers
 IN Soma, Nobuo; Morimura, Syoji; Yoshioka, Takao; Kurumada, Tomoyuki
 PA Sankyo Co., Ltd., Japan
 SO Ger. Offen., 192 pp.
 CODEN: GWXXBX

DT Patent
 LA German

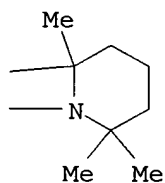
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2801470	A1	19780727	DE 1978-2801470	19780113
	JP 53101380	A2	19780904	JP 1977-3285	19770114
	JP 62042898	B4	19870910		
	FR 2377381	A1	19780811	FR 1978-999	19780113
	FR 2377381	B1	19820108		
	BE 862958	A1	19780717	BE 1978-184368	19780116
	GB 1574999	A	19800917	GB 1978-1715	19780116
	US 4371644	A	19830201	US 1980-168271	19800710
PRAI	JP 1977-3285		19770114		
	US 1978-866957		19780105		
AB	2,2-Bis[4-[2-hydroxy-3-(2,2,6,6-tetramethylpiperidino)propoxy]phenyl]propane (I, R = H) [67777-70-2], I (R = OH) [67778-13-6], I [R = 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionyloxy] [67778-14-7], tris[2-hydroxy-3-(2,2,6,6-tetramethylpiperidino)propyl] isocyanurate [67901-20-6], bis[2-hydroxy-3-(4-hydroxy-2,2,6,6-tetramethylpiperidino)propyl] 1,2-cyclohexanedicarboxylate [67777-81-5], bis[3-(4-benzoyloxy-2,2,6,6-tetramethylpiperidino)-2-hydroxypropyl] sebacate [67777-79-1], 1,3-bis[3-(4-benzoyloxy-2,2,6,6-tetramethylpiperidino)-2-hydroxypropoxy]-2-hydroxypropane [67777-84-8], 2,2-bis[4-[2-hydroxy-3-(7,7,9,9-tetramethyl-1,4-dioxo-8-azaspiro[4.5]dec-8-yl)propoxy]cyclohexyl]propane (II) [67777-93-9], 2,2-bis[4-[2-hydroxy-3-(7,7,9,9-tetramethyl-3-octyl-2,4-dioxo-1,3,8-triazaspiro[4.5]dec-8-yl)propoxy]cyclohexyl]propane [67778-00-1], and 38 similar compds. are prepd. for use as stabilizers for plastics. The stabilizers are resistant to volatilization and extn. from plastics. Thus, 2,2,6,6-tetramethylpiperidine [768-66-1] and 2,2-bis[4-(2,3-epoxypropoxy)phenyl]propane [1675-54-3] were used to prep. I (R = H). The addn. of 0.25% I (R = H) and 0.2% phenolic antioxidant to polypropylene [9003-07-0] increased the UV light resistance by a factor of 4.7.				
IT	67777-70-2P 67777-71-3P 67777-72-4P 67777-73-5P 67777-74-6P 67777-75-7P 67777-76-8P 67777-95-1P 67777-96-2P 67778-13-6P 67778-14-7P 67812-49-1P 67913-12-6P				
	RL: PREP (Preparation) (manuf. of, as stabilizers for plastics)				
RN	67777-70-2 CAPLUS				
CN	1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)				

PAGE 1-A



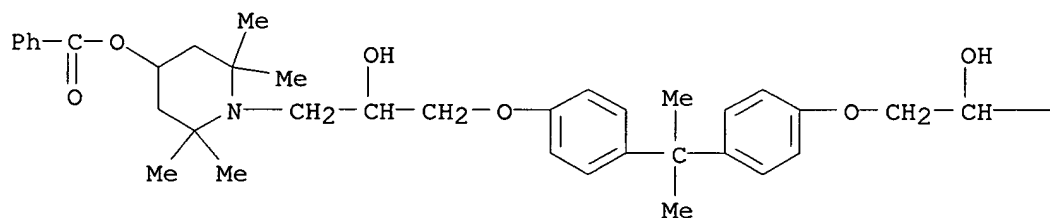
PAGE 1-B



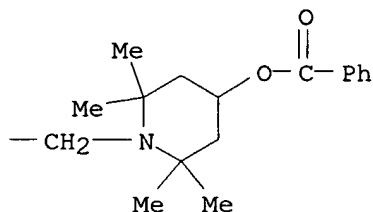
RN 67777-71-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



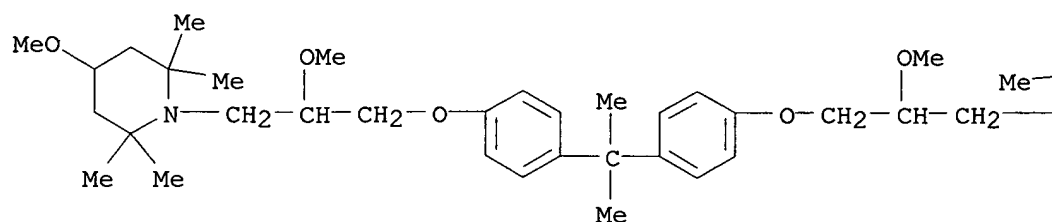
PAGE 1-B



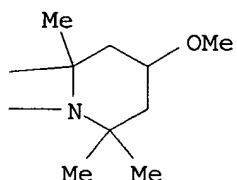
RN 67777-72-4 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-methoxy-3,1-propanediyl)]]bis[4-methoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



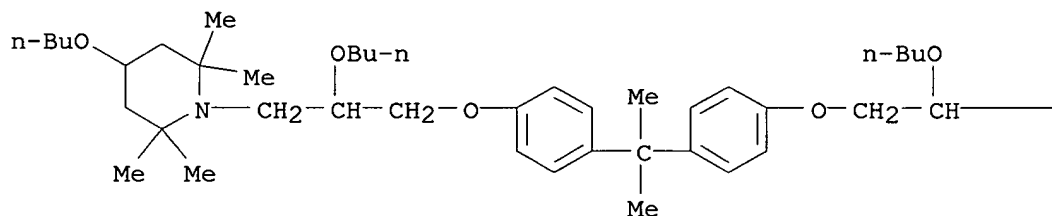
PAGE 1-B



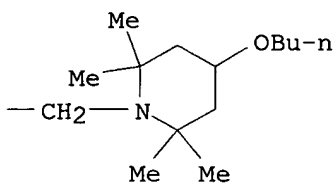
RN 67777-73-5 CAPLUS

CN Piperidine, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-butoxy-3,1-propanediyl)]]bis[4-butoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



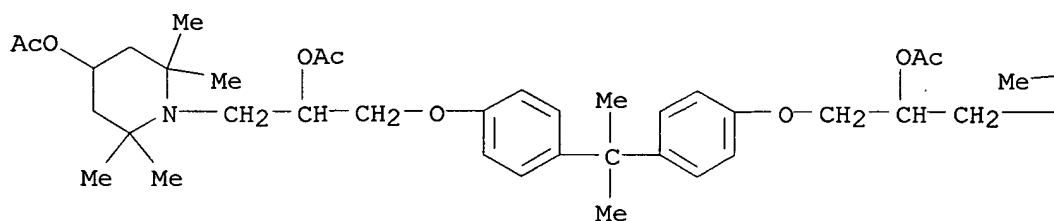
PAGE 1-B



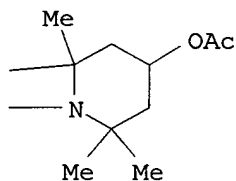
RN 67777-74-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(acetyloxy)-2,2,6,6-tetramethyl-, diacetate (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



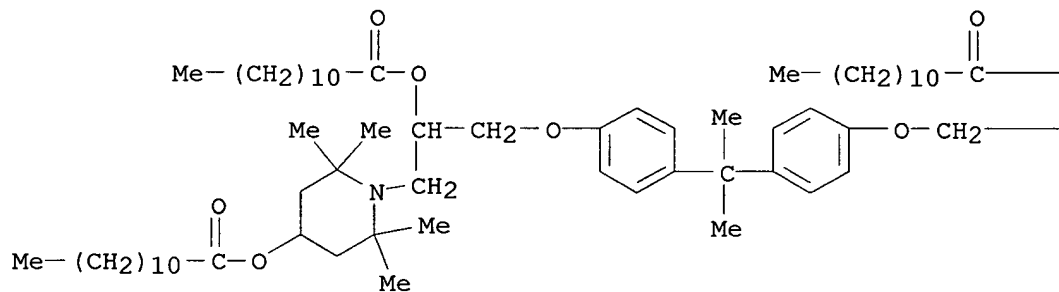
PAGE 1-B



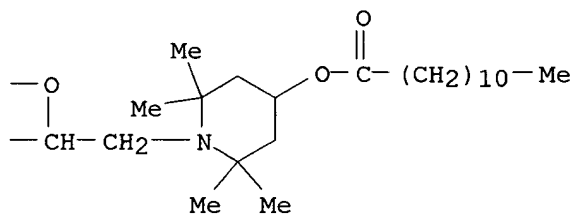
RN 67777-75-7 CAPLUS

CN Dodecanoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[2-[(1-oxododecyl)oxy]-3,1-propanediyl](2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

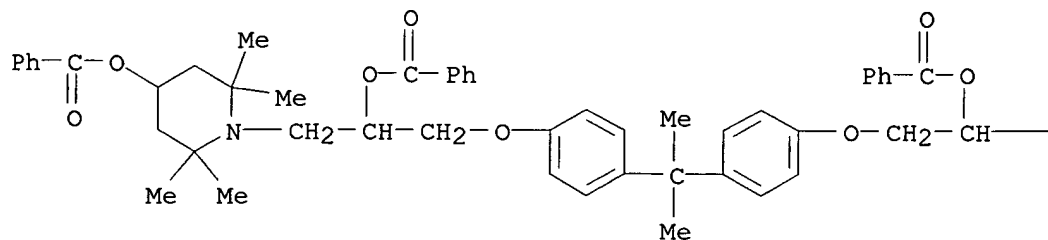


RN 67777-76-8 CAPLUS

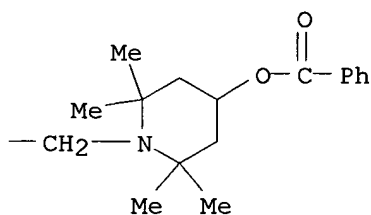
CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-(benzoyloxy)-2,2,6,6-tetramethyl-, dibenzoate

(ester) (9CI) (CA INDEX NAME)

PAGE 1-A



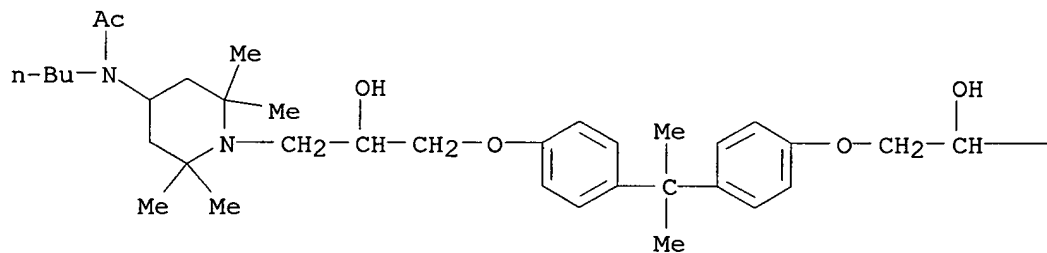
PAGE 1-B



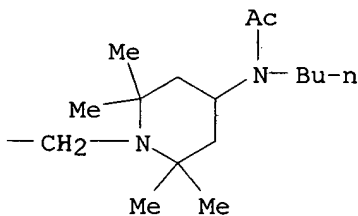
RN 67777-95-1 CAPLUS

CN Acetamide, N,N'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)(2,2,6,6-tetramethyl-1,4-piperidinediyl)]]bis[N-butyl- (9CI)
(CA INDEX NAME)

PAGE 1-A



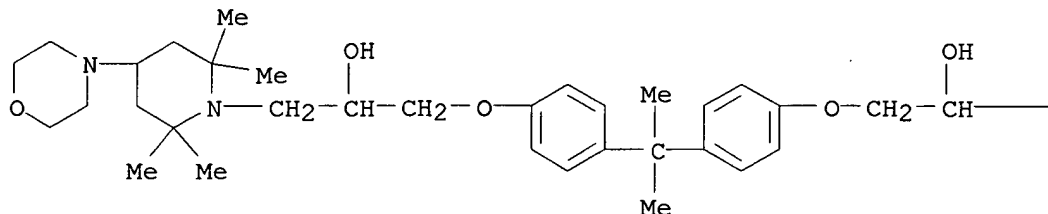
PAGE 1-B



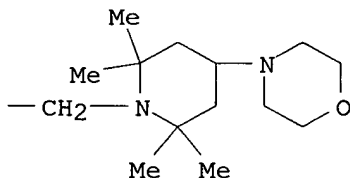
RN 67777-96-2 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-(4-morpholinyl)- (9CI)
(CA INDEX NAME)

PAGE 1-A



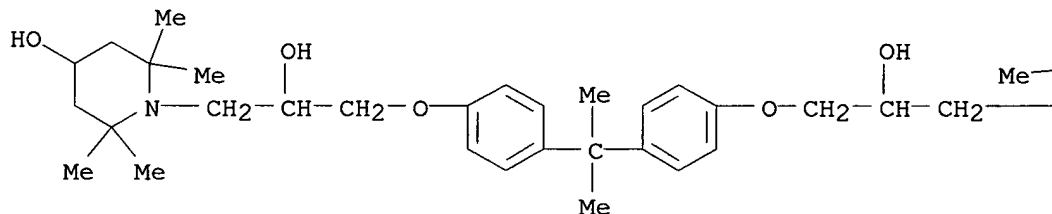
PAGE 1-B



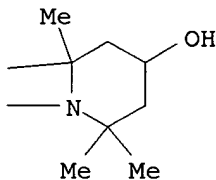
RN 67778-13-6 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-hydroxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

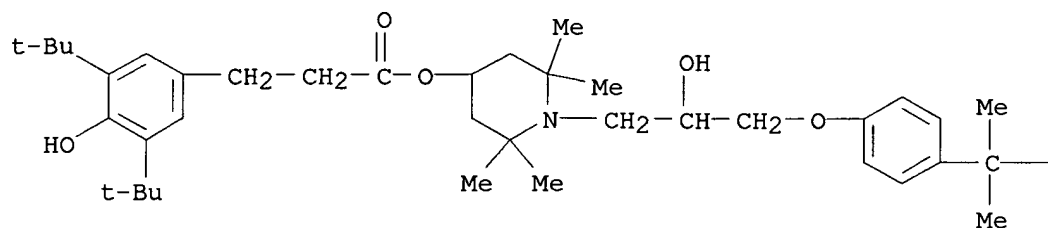


RN 67778-14-7 CAPLUS

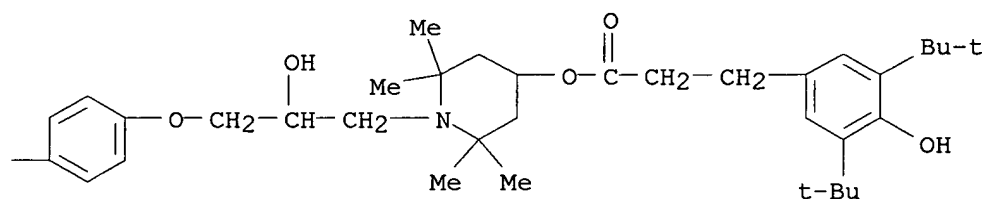
CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-

propanediyl) (2,2,6,6-tetramethyl-1,4-piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



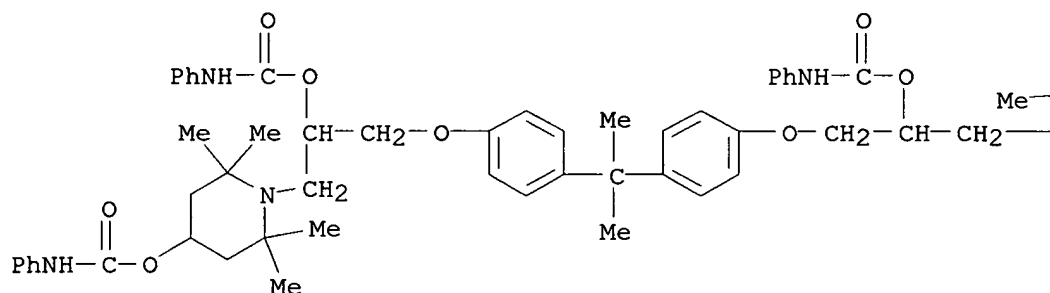
PAGE 1-B



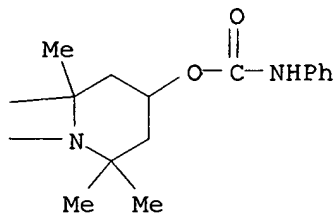
RN 67812-49-1 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[2,2,6,6-tetramethyl-4-[[(phenylamino) carbonyl]oxy]-, bis(phenylcarbamate) (ester) (9CI) (CA INDEX NAME)

PAGE 1-A



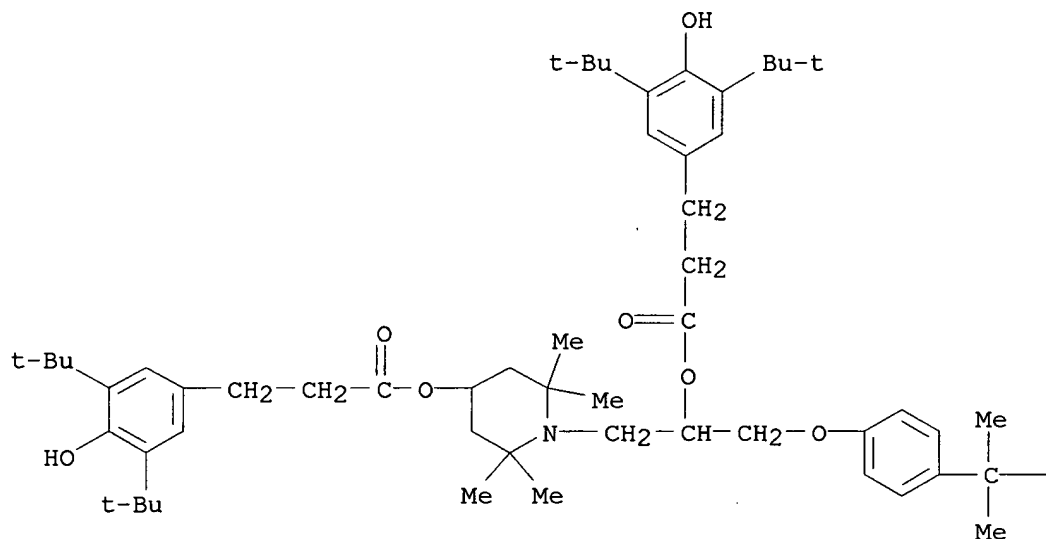
PAGE 1-B



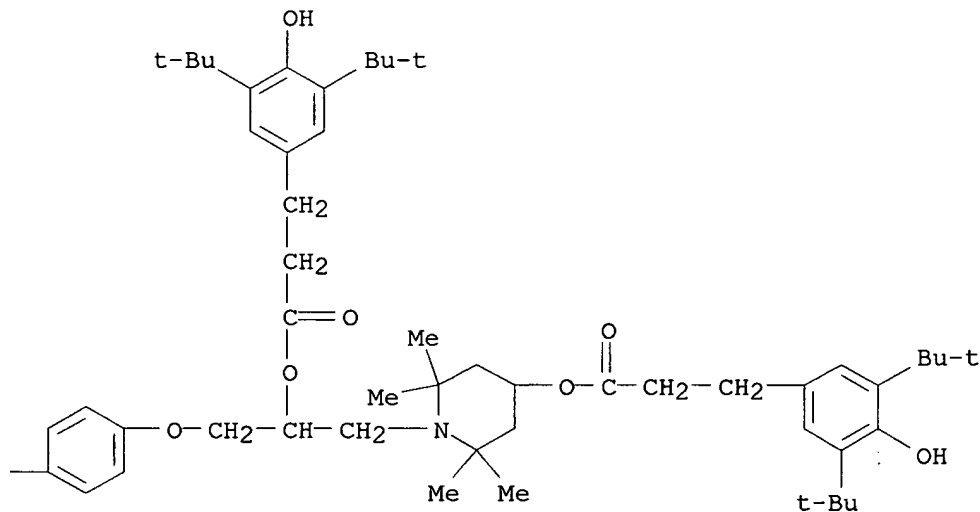
RN 67913-12-6 CAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 (1-methylethylidene)bis[4,1-phenyleneoxy[2-[3-[3,5-bis(1,1-dimethylethyl)-
 4-hydroxyphenyl]-1-oxopropoxy]-3,1-propanediyl](2,2,6,6-tetramethyl-1,4-
 piperidinediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 67777-89-3

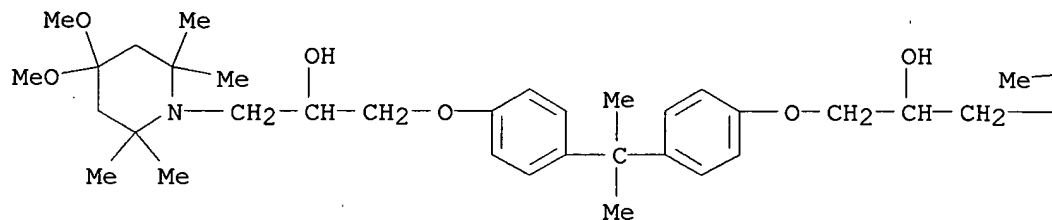
RL: USES (Uses)

(stabilizers, for plastics)

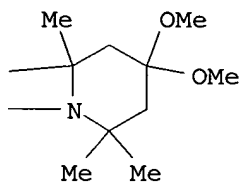
RN 67777-89-3 CAPLUS

CN 1-Piperidineethanol, .alpha.,.alpha.'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4,4-dimethoxy-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

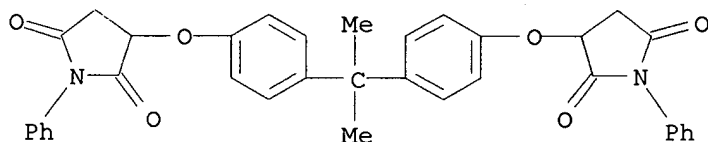


PAGE 1-B

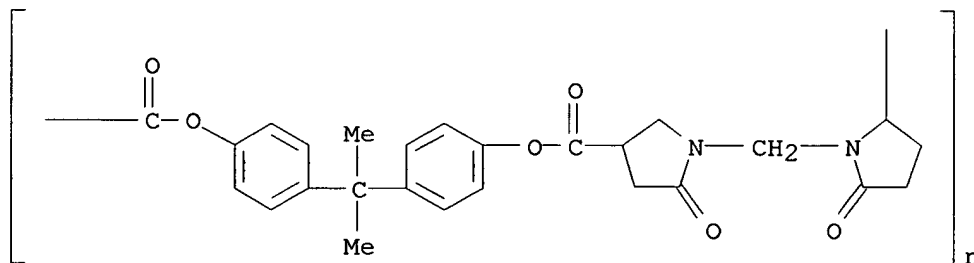


file

L4 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1978:510472 CAPLUS
 DN 89:110472
 TI The reaction of phenols with N-substituted maleimides
 AU Renner, Alfred; Forgo, Imre; Hofmann, Walter; Ramsteiner, Klaus
 CS Div. Kunstst. Addit., Ciba-Geigy A.-G., Basel, Switz.
 SO Helvetica Chimica Acta (1978), 61(4), 1443-53
 CODEN: HCACAV; ISSN: 0018-019X
 DT Journal
 LA German
 AB Phenoxysuccinimides I (R = H, alkyl, EtO₂C, Cl, R₁ = Ph, cyclohexyl, hexyl) were prepd. from the corresponding p-RC₆H₄OH and maleimides in the presence of basic catalysts, with yields of .ltoreq.90% being obtained in the presence of tertiary alkylamines. Adducts of bisphenols with maleimides and of phenols with bismaleimides were also prepd. The purified phenoxysuccinimides were stable, but the presence of the basic catalyst caused their decompn. into the phenol and an oligomeric maleimide. A resinous polymer, prepd. from 1 mol bisphenol A and 2 mol 4,4'-bis(maleimido)diphenylmethane, was cast into a sheet and cured 14 h at 190.degree. and 4 h at 220.degree., giving a cured product with bending strength 135 N/mm², impact bending strength 0.7 N-cm/mm², heat distortion temp. 274.degree., water absorption at room temp. 0.82%, sp. elec. resistance 4.2 .times. 10¹⁶ .OMEGA.-cm, dielec. const. 3.6, and excellent retention of phys. properties on heat aging at 270.degree..
 IT **67354-88-5P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 67354-88-5 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1977:602159 CAPLUS
 DN 87:202159
 TI Condensation products of pyrrolidonecarboxylic acids with diamines and diols
 AU Marini, Ingo
 CS Inst. Chem. Technol. Org. Stoffe, Tech. Hochsch. Wien, Vienna, Austria
 SO Lenzinger Berichte (1977), 42, 12-14
 CODEN: LEBEAW; ISSN: 0024-0907
 DT Journal
 LA German
 AB Since 5-oxo-2-pyrrolidonecarboxylic acid (I) [98-79-3], a byproduct of the sugar industry, cannot be polymd. directly or via its N-carboxy anhydride, attempts were made to convert I to polymerizable derivs. Reaction of I with s-trioxane [110-88-3] gave the 1,1'-methylene-bis deriv. [16473-66-8], which was converted with SOCl₂ to the diacid chloride (II) [56747-10-5]. Interfacial polymn. with diamines gave II-H₂N(CH₂)₆NH₂ polymer [56747-11-6], II-H₂NCH₂CH₂NH₂ polymer [63448-70-4], and II-p-C₆H₄(NH₂)₂ polymer [63481-03-8], with mol. wts. .ltoreq.6400. Bead polymn. of II with bisphenol A gave a polyester [63448-71-5], m. 239-57.degree., decomp. at 260.degree.. Reaction of the Me [35309-35-4], Bu [4931-68-4], and benzyl [60555-57-9] esters of I with terephthaloyl chloride [100-20-9] gave 1,1'-terephthaloyl derivs.; catalytic redn. of the benzyl ester give the diacid [63438-56-2], the acid chloride [63438-57-3] of which was unsuitable for interfacial polymn. The 1,1'-adipoyl deriv. [63438-58-4] of I Me ester was also prepd.
 IT **63414-09-5P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 63414-09-5 CAPLUS
 CN Poly[(5-oxo-2,1-pyrrolidinediyl)methylene(5-oxo-1,3-pyrrolidinediyl)carbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl], [(S),(S)]- (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1973:84060 CAPLUS
 DN 78:84060
 TI Bisphenoxy acid derivatives
 IN Suzuki, Yoshio; Minai, Masayoshi; Hamma, Noritaka; Murayama, Eiichi; Aono, Shunji
 PA Sumitomo Chemical Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48000552	A2	19730106	JP 1971-34867	19710522
	FI 54289	C	19781110	FI 1972-1425	19720519
PRAI	JP 1971-34866	A	19710522		
	JP 1971-34867	A	19710522		

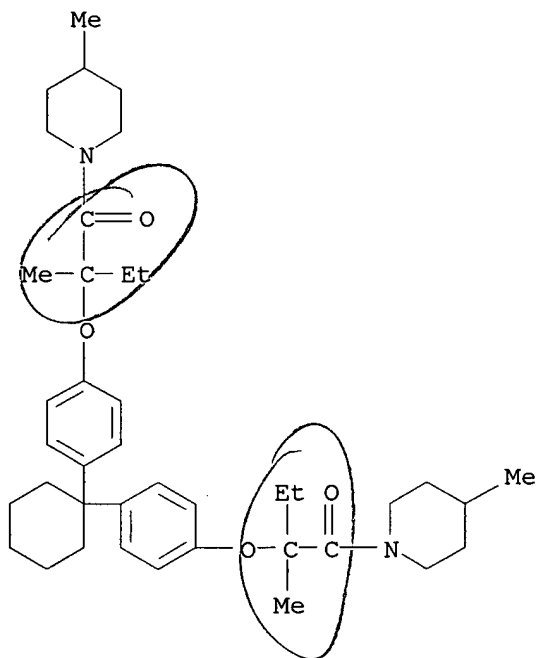
AB Title compds. (I), useful as remedies for arteriosclerosis, were prepd. from the corresponding acids. Thus, 2.6 g ClCO₂Et, 4.7 g I (R = Et, R₁ = OH), NEt₃, and CH₂Cl₂ was treated with H₂NCH₂CH₂OH to give 2.7 g I [R = Et, R₁ = NH(CH₂)₂OH]. Similarly prepd. I were (R and R₁ given): Me, NH(CH₂)₂OAc; Et, morpholino; Et, 4-methylpiperidino; Et, 2-pyridylamino; and Me, NH(CH₂)₂NHCO₂CH₂Ph.

IT 39755-48-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

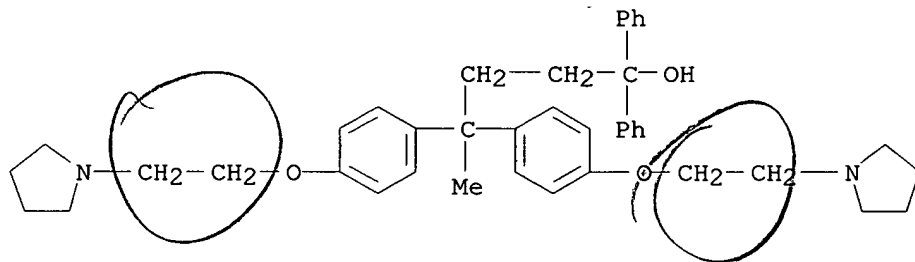
RN 39755-48-1 CAPLUS

CN Piperidine, 1,1'-[cyclohexylidenebis[4,1-phenyleneoxy(2-ethyl-2-methyl-1-oxo-2,1-ethanediyl)]]bis[4-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1970:445117 CAPLUS
 DN 73:45117
 TI Hypocholesteremic bis(p-hydroxyaryl)alkanoic acids
 IN Fried, Josef; Pribyl, Edward J.
 PA Squibb, E. R., and Sons, Inc.
 SO Brit., 14 pp. Division of Brit. 1193686
 CODEN: BRXXAA
 DT Patent
 LA English
 FAN.CNT 1

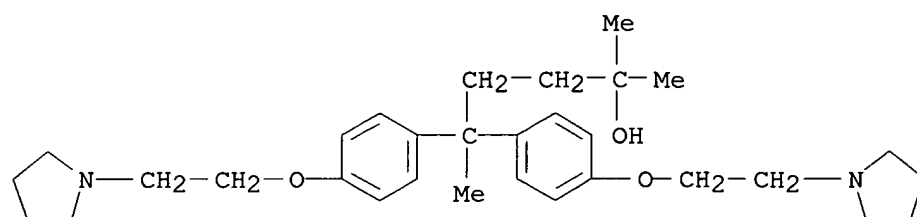
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1193687		19700603	GB	19670425
AB	<p>I and II where R is dialkylaminoalkyl, R₁ is alkyl or aryl, R₂ is H or aryl, R₃ is H, OMe, or MeNHCH₂, and X (in I) is H or OH, useful as hypocholesteremic agents, are prep'd. by Grignard reactions, mainly from Me, 4,4-bis(4-hydroxyphenyl)pentanoate (III). Thus, a soln. of 60 g III was added to a boiling soln. of the Grignard reagent from 142 g PhBr, 21.9 g Mg, and 600 ml Et₂O, the mixt. refluxed 2 hr, and the product saponified to give 23 g .alpha.-[3,3-Bis(p-hydroxyphenyl)butyl]benzhydrol. Refluxing 20 g of this with 100 ml Ac₂O 8 hr gave 25 g di-Ac deriv. Hydrolysis of this with 10% NaOH 8 hr gave 16 g 4,4'-(1-methyl-4,4-diphenyl-3-butenylidene)diphenol (IV). A soln. of 3 g IV in 50 ml EtOH was added to a soln. of 0.358 g Na in 50 ml EtOH, 2.2 g Et₂NCH₂CH₂Cl added and the mixt. refluxed 7 hr to give II (R = Et₂NCH₂CH₂, R₁ = R₂ = Ph, R₃ is H). Pd-catalyzed hydrogenation of the double bond in IV, followed by treatment with Et₂NCH₂CH₂Cl gave I (R = Et₂NCH₂CH₂, R₁ = R₂ = Ph, R₃ = X = H). About 15 other compds. were prep'd.</p>				
IT	<p>25040-91-9P 25162-64-5P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)</p>				
RN	25040-91-9 CAPLUS				
CN	Benzhydrol, .alpha.-[3,3-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]butyl]-, dihydrochloride (8CI) (CA INDEX NAME)				



● 2 HCl

RN 25162-64-5 CAPLUS
 CN 2-Hexanol, 2-methyl-5,5-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]-, citrate (1:2) (salt) (8CI) (CA INDEX NAME)
 CM 1
 CRN 47770-45-6

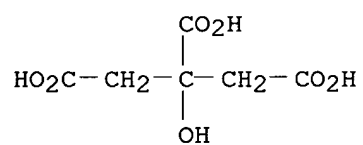
CMF C31 H46 N2 O3



CM 2

CRN 77-92-9

CMF C6 H8 O7



L4 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1970:43184 CAPLUS
 DN 72:43184
 TI Bis(p-hydroxyaryl) alkanolic acid derivatives
 IN Fried, Josef; Pribyl, Edward J.
 PA Squibb, E. R., and Sons, Inc.
 SO Fr., 9 pp.
 CODEN: FRXXAK
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 1523857		19680503		
	FR 6905			FR	
	US 3576874		19710000	US	
	US 3718643		19730000	US	
	US 3809720		19740000	US	
PRAI	US		19660719		

AB The title compds. (I) are useful in the treatment of atherosclerosis. To the Grignard reagent prep'd. from 142 g PhBr and 21.9 g Mg in 600 ml Et₂O was added at reflux 60 g methyl 4,4-bis(4-hydroxyphenyl)pentanoate, and refluxed 3 hr to give 23 g α -[3,3-bis(p-hydroxyphenyl)butyl]benzhydrol (Ia), m. 118-19.degree. (aq. EtOH). A mixt. 20 g Ia and 100 ml Ac₂O was refluxed 8 hr to give 25 g diacetyl deriv. Ia m. 50-2.degree.. This product was boiled 8 hr with 120 ml of a 10% Na₂CO₃ soln. to give 16 g I (R = Me, R₁ = R₂ = R₃ = H, n = 1, Q = CH:CHPh₂) (Ib), m. 149-50.degree. (aq. EtOH). To 3 g Ib in 50 ml abs. MeOH was added 0.358 g Na in 50 ml abs. EtOH, then 2.2 g ClCH₂CH₂NEt₂ in 20 ml EtOH and refluxed 7 hr to give 5.1 g product which was treated in Et₂O with a slight excess of oxalic acid to give 2.9 g I (R = Me, R₁ = CH₂CH₂NEt₂, R₂ = R₃ = H, n = 1, Q = CH:CHPh₂) dioxalate, m. 89-91.degree. (MeCOEt). A soln. 10 g I (R = Me, R₁ = R₂ = R₃ = H, n = 1, Q = CH:CHPh₂) in 50 ml 95% EtOH and 1 g PdO was hydrogenated to give 9 g I (R = Me, R₁ = R₂ = R₃ = H, n = 2, Q = CHPh₂) m. 159-60.degree. (50% aq. EtOH). To a soln. of 6 g of this product in 50 ml EtOH was added an EtOH soln. contg. 1.38 g Na, and a soln. 5.3 g ClCH₂CH₂NEt₂ in 50 ml EtOH to give 6.6 g I (R = Me, R₁ = CH₂CH₂NEt₂, R₂ = R₃ = H, n = 2, Q = CHPh₂) dioxalate, m. 86-9.degree. (MeCOEt). A mixt. of 4,4-diphenylol-valeroyldiphenolic acid, 615 ml 95% EtOH, 60 g Na₂CO₃, 400 ml H₂O, and 200 ml PhCOCl was refluxed 6 hr, kept overnight at the ambient temp., 100 g K₂CO₃ added and refluxed 8 hr to give 188 g I (R = Me, R₁ = CPh, R₂ = R₃ = H, n = 2, Q = CO₂H), m. 96-7.degree. (cyclohexane). To 45 g of this in C₆H₆ was added 200 ml SOCl₂, refluxed 8 hr and the C₆H₆ distd. to give the acid chloride. To the Grignard reagent prep'd. from 32 g PhBr, 5 g Mg and 200 ml Et₂O was added 19.6 g anhyd. CdCl₂ over 10 min, refluxed 1 hr, the Et₂O distd. and 200 ml anhyd. C₆H₆ added. The acid chloride (49 g) was added slowly, refluxed 1 hr, and poured onto ice and H₂O to give 25 g I (R = Me, R₁ = Bz, R₂ = R₃ = H, n = 2, Q = Bz), m. 113-15.degree. (hexane). A mixt. of 30 g this product, 200 ml EtOH, and 1 g PdO was heated with H to give 16 g I [R = Me, R₁ = R₂ = R₃ = H, n = 2, Q = PhCH(OH)], m. 55-8.degree.. This compd. (15 g) was treated with 100 ml Ac₂O to give 11 g I (R = Me, R₁ = R₂ = R₃ = H, n = 1, Q = CH:CHPh). To a soln. of 10 g this compd. in 50 ml EtOH was added 1.3 g Na in 50 ml EtOH and 9 g ClCH₂CH₂NEt₂ in 20 ml EtOH to give 10 g I (R = Me, R₁ = CH₂CH₂NEt₂, R₂ = R₃ = H, n = 1, Q = CH:CHPh). The following I were similarly prep'd. (R, R₁, R₂, R₃, n, and Q given): Me, CH₂CH₂NEt₂, H, H, 3, Ph; Me, (CH₂)₃NC₅H₁₀, H, H, 1, CH:CHPh; Me, (CH₂)₃NMe₂, Cl, H, 3, Ph; Et, (CH₂)₂NEt₂, H, H, 1, CH:CPh₂; Me,

(CH₂)₃NMe₂, Me, H, 1, CH:CPh₂. To a soln. of 60 g I (R = Me, R₁ = R₂ = R₃ = H, n = 2, Q = CO₂Me) and 188 g 40% NHMe₂ was added at 10.degree. with stirring 146 g 37% CH₂O over 0.5 hr and refluxed 2 hr to give 40 g I (R = Me, R₁ = H, R₂ = R₃ = CH₂NMe₂, n = 2, Q = CO₂Me). From this was obtained I [R = Me, R₁ = (CH₂)₃NMe₂, R₂ = R₃ = CH₂NMe₂, n = 1, Q = CH:CPh₂]. A soln. of I (R = Me, R₁ = R₂ = R₃ = H, n = 1, Q = CH:CPh₂) in MeOH was treated with a slight excess Na₂CO₃ and an equiv. of Me₂SO₄ at 70.degree. to give I (R = Me, R₁ = Me, R₂ = R₃ = H, n = 1, Q = CH:CPh₂). To a cooled mixt. of 155 g o-MeC₆H₄OH and 72 g ethyl levulinate was added dropwise with stirring 50 ml concd. H₂SO₄ to give I (R = Me, R₁ = R₂ = H, R₃ = OMe, n = 2, Q = CO₂Et). From this was obtained I (R = Me, R₁ = C₂H₄NEt₂, R₂ = R₃ = H, n = 1, Q = CH:CPh₂). A soln. of 99 g I (R = Me, R₁ = R₂ = R₃ = H, n = 2, Q = CO₂Et) in 200 ml HCONEt₂ was treated portionwise with 30 g 50% NaH keeping the temp. <60.degree., after addn. heated to 80.degree., treated with 290 ml ClC₂H₄NEt₂ (2.2N) in PhMe and kept 100-10.degree. 3 hr to give 66% I (R = Me, R₁ = C₂H₄NEt₂, R₂ = R₃ = H, n = 2, Q = CO₂Et). To a soln. of PhMgBr prepd. from 18 g Mg, 120 g PhBr, and 500 ml Et₂O was added a soln. of 80 g of the prepd. I in 500 ml tetrahydrofuran and refluxed 5 hr to give I (R = Me, R₁ = C₂H₄NEt₂, R₂ = R₃ = H, n = 2, Q = COHPh₂) dioxalate, m. 92-4.degree. (decompn.). The following I were also prepd. (R, R₁, R₂, R₃, n, and Q given): Me, C₂H₄NMe₂, H, H, 2, CO₂Me; Me, C₂H₄NMe₂, H, H, COHPh₂, 2(HCl) m. 148-50.degree. (decompn.); Me, C₂H₄X (X = pyrrolidino), H, H, 2, CO₂Me, b12 67.degree.; Me, C₂H₄X, H, H, 3, Ph₂, 2(HCl)H₂O m. 128-31.degree. foam; Me, C₂H₄X, H, H, 2, COHMe₂, dicitrate m. 78-81.degree. (foam).

IT 25040-86-2P 25040-91-9P 25162-64-5P

25162-69-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

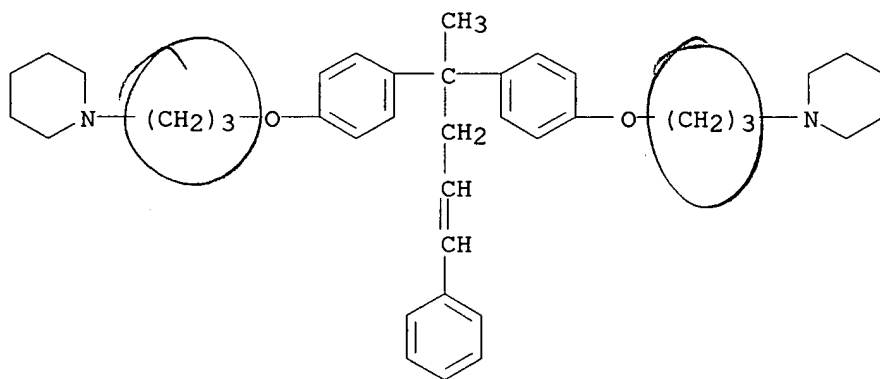
RN 25040-86-2 CAPLUS

CN Piperidine, 1,1'-[(1-methyl-4-phenyl-3-butenylidene)bis(p-phenyleneoxytrimethylene)]di-, oxalate (1:2) (8CI) (CA INDEX NAME)

CM 1

CRN 47842-61-5

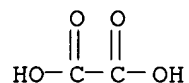
CMF C39 H52 N2 O2



CM 2

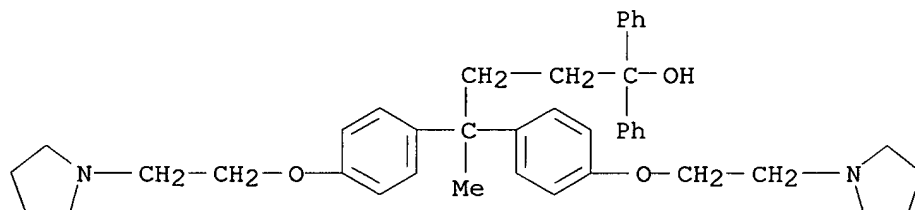
CRN 144-62-7

CMF C2 H2 O4



RN 25040-91-9 CAPLUS

CN Benzhydrol, .alpha.-[3,3-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]butyl]-, dihydrochloride (8CI) (CA INDEX NAME)



● 2 HCl

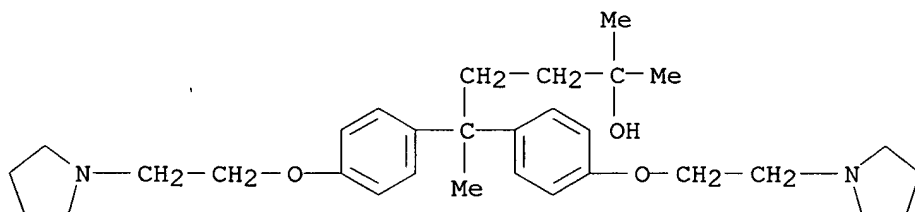
RN 25162-64-5 CAPLUS

CN 2-Hexanol, 2-methyl-5,5-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]-, citrate (1:2) (salt) (8CI) (CA INDEX NAME)

CM 1

CRN 47770-45-6

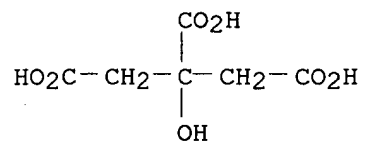
CMF C31 H46 N2 O3



CM 2

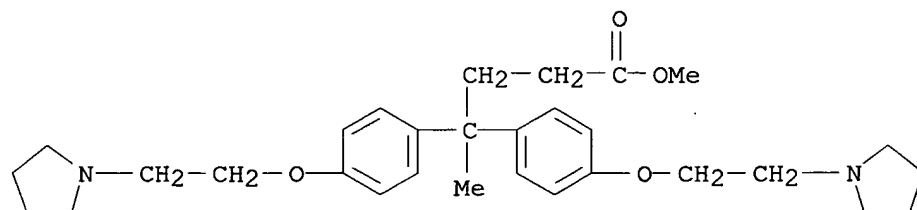
CRN 77-92-9

CMF C6 H8 O7



RN 25162-69-0 CAPLUS

CN Valeric acid, 4,4-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]-, methyl ester
(8CI) (CA INDEX NAME)



L4 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1969:449603 CAPLUS
 DN 71:49603
 TI 4,4-Bis[p(2-dialkylaminoethoxy)phenyl]valeric acid
 IN Fried, Josef; Pribyl, Edward J.; Krapcho, John
 PA Squibb, E. R., and Sons, Ltd.
 SO Fr., 4 pp.
 CODEN: FRXXAK
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 1515618		19680301		
	DE 1593985			DE	
	FR 6583			FR	
	US 3576874		19710000	US	
	US 3652658		19720000	US	
	US 3718643		19730000	US	
	US 3809720		19740000	US	
PRAI	US		19660719		

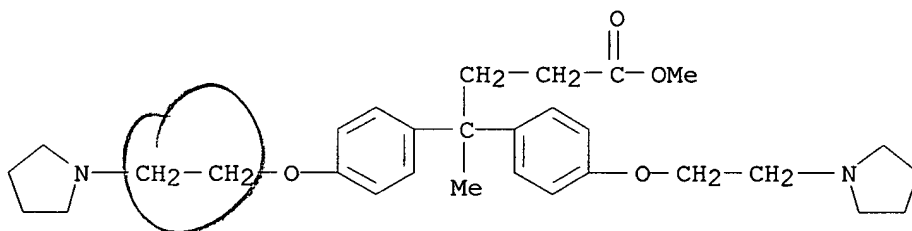
AB Esters Me-[p-(R₂NCH₂CH₂O)C₆H₄]₂CCH₂CH₂CO₂R₁ (I) are prepd. Thus, 0.63 mole NaH (50% dispersion) is added to a soln. of 99.0 g. Me(p-HOC₆H₄)₂CCH₂CH₂CO₂Et in 200 ml. HCONMe₂, the mixt. is cooled to <60.degree., heated to 80.degree., and cooled to 40.degree., 0.63 mole Et₂NCH₂CH₂Cl (2.2N in PhMe) is added, and the mixt. is heated 3 hrs. at 100-10.degree. and worked up to give 66% ethyl 4,4-bis[p-(2-diethylaminoethoxy)phenyl]valerate (II). Similarly prepd. are I (R = R₁ = Me) (III) and I (R₂N = pyrrolidinyl, R₁ = Me). II is hydrolyzed to I (R = Et, R₁ = H). III is reduced (LiAlH₄) to give 4,4-bis[p-(2-dimethylaminoethoxy)-phenyl]pentanol which is converted to the decanoate.

IT **22979-54-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 22979-54-0 CAPLUS

CN Valeric acid, 4,4-bis[p-[2-(1-pyrrolidinyl)ethoxy]phenyl]-, methyl ester, hydrochloride (8CI) (CA INDEX NAME)



●x HCl

=> d his

(FILE 'HOME' ENTERED AT 19:09:38 ON 16 OCT 2003)

FILE 'REGISTRY' ENTERED AT 19:10:21 ON 16 OCT 2003

L1 STRUCTURE UPLOADED

L2 0 S L1 SSS SAM

L3 92 S L1 SSS FUL

FILE 'CAPLUS' ENTERED AT 19:11:20 ON 16 OCT 2003

L4 17 S L3

FILE 'CAOLD' ENTERED AT 19:12:00 ON 16 OCT 2003

=> s 13

L5 0 L3

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.40

226.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

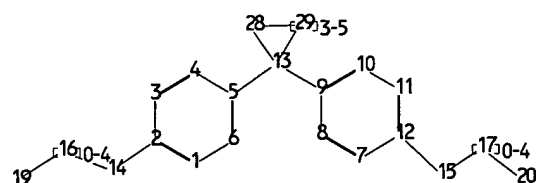
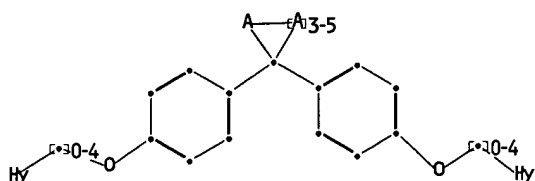
SESSION

CA SUBSCRIBER PRICE

0.00

-11.07

STN INTERNATIONAL LOGOFF AT 19:12:12 ON 16 OCT 2003



chain nodes :

14 15 16 17 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 28 29

chain bonds :

2-14 5-13 9-13 12-15 14-16 15-17 16-19 17-20

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-28 13-29 28-29

exact/norm bonds :

2-14 12-15 13-28 13-29 14-16 15-17 16-19 17-20 28-29

exact bonds :

5-13 9-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 1 : 7 : 13 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 28:Atom
29:CLASS

Generic attributes :

19:

Saturation : Saturated
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

20:

Saturation : Saturated
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

Element Count :

Node 19: Limited

N,N1

C,C3

O,O0

S,S0

Node 20: Limited

N,N1

C,C3

O,O0

S,S0

=>

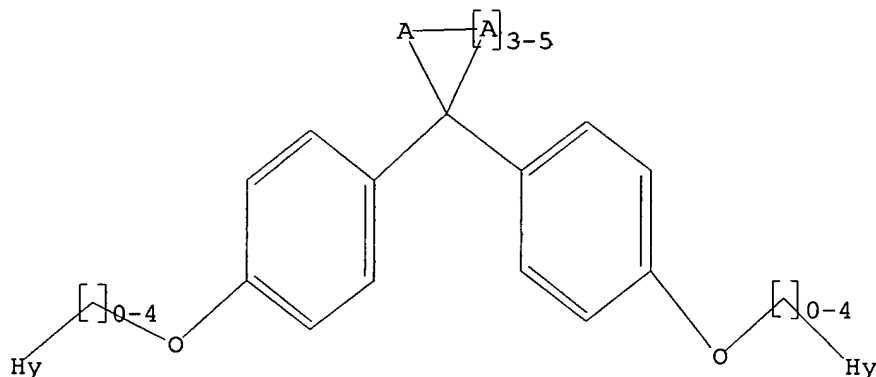
Uploading 09943420 (amd - partial).str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 19:15:38 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2264 TO ITERATE

44.2% PROCESSED 1000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 42427 TO 48133

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss ful

FULL SEARCH INITIATED 19:15:47 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 45555 TO ITERATE

100.0% PROCESSED 45555 ITERATIONS
 SEARCH TIME: 00.00.02

3 ANSWERS

L3 3 SEA SSS FUL L1

=> s l3

L4 2 L3

=> d l4 1-2 bib,ab,hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:171852 CAPLUS
 DN 136:216528
 TI Preparation of linked benzene derivatives as sodium channel modulators
 IN Chinn, Jason P.; Choi, Seok-ki; Fatheree, Paul R.; Marquess, Daniel;
 Turner, S. Derek
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018334	A2	20020307	WO 2001-US27128	20010830
	WO 2002018334	A3	20020613		
	WO 2002018334	B1	20020926		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001086965	A5	20020313	AU 2001-86965	20010830
US 2003027822	A1	20030206	US 2001-943420	20010830
PRAI US 2000-229572P	P	20000831		
WO 2001-US27128	W	20010830		

OS MARPAT 136:216528

AB Title compds. I [R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, etc.; R2 = bond, (un)substituted alkylene; X = O, NR_m wherein R_m = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -heteroaryl, etc.; Y = (un)substituted amine or a (un)substituted heterocyclyl contg. at least one N, wherein each nitrogen of the heterocyclyl is substituted with R3 or is linked to R2; R3 = H, alkyl, aryl, oxo, heterocyclyl, etc., or R3 is joined to another substituent of Y to form a (un)substituted C1-4 alkylene group; Q = O, S(O)_m, (CR₅R₆)_w, O(CR₅R₆)_rO, N(R_k) where m = 0-2, w = 1-3, r = 2-3; R_k = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; R5 and R6 are independently H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl; or R5 and R6 together with the carbon atom to which they are attached may form a (un)substituted-cycloalkyl or -heterocyclyl; p = 0-4] and their pharmaceutically acceptable salts are prepd. and disclosed as sodium channel modulators. Thus, II was prepd. from 4,4'-methylenebis(2,6-dimethylphenol) and N-Boc-3-(hydroxymethyl)piperidine under Mitsunobu conditions with successive N-deprotection. As sodium channel modulators, I are useful for treating diseases or conditions assocd. with sodium channel activity, such as neuropathic pain. II exhibited an IC₅₀ value of less than 100 .mu.M in a rat cerebellar granule neuron assay. The invention also provides pharmaceutical compns. comprising a compd. of formula (I) or a salt thereof, as well as therapeutic methods comprising administering such a compd. or salt to a mammal (e.g. a human).

IT 402759-68-6P 402760-05-8P

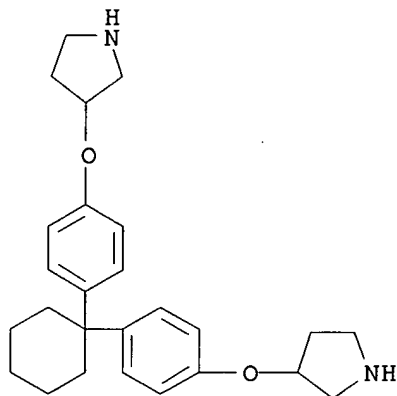
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(prepn. of linked benzene derivs. via Mitsunobu reaction of linked phenols with the requisite alc.)

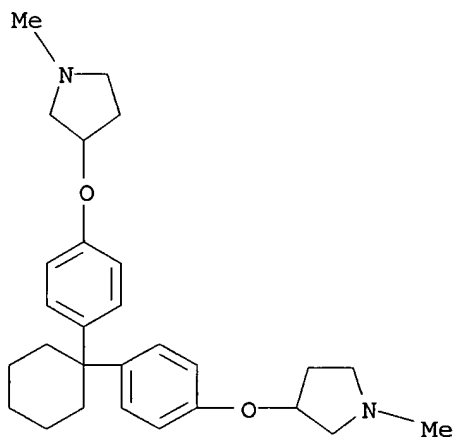
RN 402759-68-6 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



RN 402760-05-8 CAPLUS

CN Pyrrolidine, 3,3'-[cyclohexylidenebis(4,1-phenyleneoxy)]bis[1-methyl- (9CI) (CA INDEX NAME)



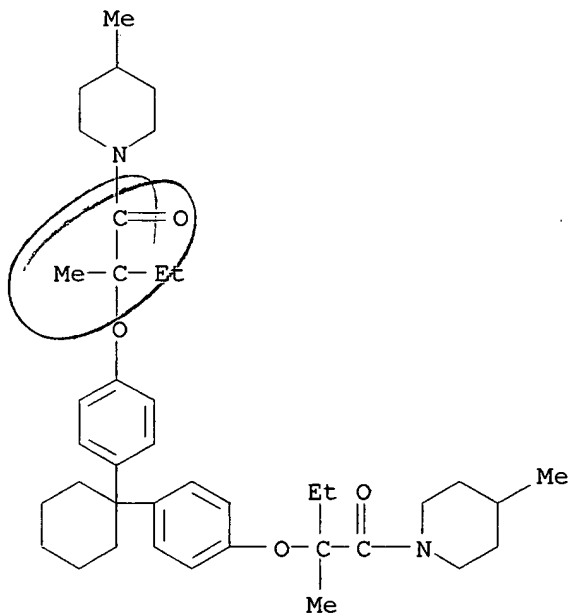
L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1973:84060 CAPLUS
 DN 78:84060
 TI Bisphenoxy acid derivatives
 IN Suzuki, Yoshio; Minai, Masayoshi; Hamma, Noritaka; Murayama, Eiichi; Aono, Shunji
 PA Sumitomo Chemical Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48000552	A2	19730106	JP 1971-34867	19710522
	FI 54289	C	19781110	FI 1972-1425	19720519
PRAI	JP 1971-34866	A	19710522		
	JP 1971-34867	A	19710522		

AB Title compds. (I), useful as remedies for arteriosclerosis, were prepd. from the corresponding acids. Thus, 2.6 g ClCO₂Et, 4.7 g I (R = Et, R₁ = OH), NEt₃, and CH₂Cl₂ was treated with H₂NCH₂CH₂OH to give 2.7 g I [R = Et, R₁ = NH(CH₂)₂OH]. Similarly prepd. I were (R and R₁ given): Me, NH(CH₂)₂OAc; Et, morpholino; Et, 4-methylpiperidino; Et, 2-pyridylamino; and Me, NH(CH₂)₂NHCO₂CH₂Ph.

IT **39755-48-1P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 39755-48-1 CAPLUS
 CN Piperidine, 1,1'-[cyclohexylidenebis[4,1-phenyleneoxy(2-ethyl-2-methyl-1-oxo-2,1-ethanediyl)]]bis[4-methyl- (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 19:15:05 ON 16 OCT 2003)

FILE 'REGISTRY' ENTERED AT 19:15:10 ON 16 OCT 2003

L1 STRUCTURE UPLOADED

L2 0 S L1 SSS SAM

L3 3 S L1 SSS FUL

FILE 'CAPLUS' ENTERED AT 19:15:54 ON 16 OCT 2003

L4 2 S L3

FILE 'CAOLD' ENTERED AT 19:16:13 ON 16 OCT 2003

=> s 13

L5 0 L3

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.40

158.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-1.30

STN INTERNATIONAL LOGOFF AT 19:16:30 ON 16 OCT 2003